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THE

EUPHRATES EXPEDITION.

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VIEW OF PORT WILLIAM AND THE TOWN OF [illegible]

NARRATIVE

OF THE

EUPHRATES EXPEDITION

CARRIED ON

BY ORDER OF THE BRITISH GOVERNMENT

DURING THE YEARS 1835, 1836, AND 183[illegible]

BY

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COMMANDER OF THE EXPEDITION.

LONDON:
LONGMANS, GREEN, AND CO.
1868.

00058961

TO

HER MOST GRACIOUS MAJESTY.

QUEEN VICTORIA.

MADAM,

Permit me to place at Your Majesty's feet the result of a Special Service which was undertaken by a Vote of Parliament, the Narrative of which, owing to peculiar circumstances, has remained unpublished up to this moment.

I would briefly mention to Your Majesty that two armed steam-vessels, with a body of scientific officers, artillerymen, sappers, and seamen, were placed under my orders, to carry out the Survey and Navigation of the Rivers Euphrates and Tigris, with the view of effecting a more rapid Overland Communication with India, by the commands of His late Majesty King William IV.; and that, having successfully accomplished these objects, the detailed Surveys and Maps of

the Rivers Euphrates and Tigris were, by command of Your Majesty, placed before both Houses of Parliament.

During the time which has elapsed since, in 1832, I took the first steps towards the all-important object of our Overland Communication with India, it has pleased Your Majesty to advance me successively from the rank of Captain, which I then held, to that of General in Your Majesty's Army.

I have the honour to be,

MADAM,

With profound respect,

Your Majesty's most humble and devoted servant,

F. R. CHESNEY,

GENERAL, ROYAL ARTILLERY.

PREFACE.

IN offering to the public the Narrative of an Expedition carried out more than thirty years ago, and written now at a period of life when most men seek for repose of mind and body, it would seem as if some explanation were necessary to account for the delay which has taken place in its publication. This explanation I have given in the introductory and concluding chapters of my work, and I have therefore little left to add to what the reader will there find detailed.

Had not Her Majesty's Government proposed and requested that this Narrative should appear, I confess that at this late period I should not have had the heart to undertake and complete it. It has, however, been to me a 'labour of love;' and in recalling to life the various incidents of the Euphrates Expedition, which have slumbered and slept for so many years, they have come forth from memory's cells with much of their old freshness, and have renewed all that interest in the important question of an improved Overland

Communication with India which repeated disappointment experienced on my part had partially crushed.

When a man feels that what he has to say is worth saying—that the object he has in view is worth carrying out—he will, if he be worth anything, stick to it through evil report and good report, through rainy days and fine. Such has been my case; even though, as in the instance of the Euphrates Route to India, the 'rainy days' have scarcely been intermitted by any gleams of sunshine.

When I returned from the East in 1837, it was with the full belief that a question of such vast importance to Great Britian—nationally, politically, and commercially—would be at once taken up warmly by the Government and the public. The way had been opened—difficulties which at one time looked formidable had been overcome; the Arabs and the Turkish Government were most favourable to the projected Line to India. But thirty-one years have since passed, and *nothing has been done!*

Where the obstacles lie—where the political or monetary hindrances to the execution of this great and beneficial project, it is perhaps scarcely for me to indicate; but there can be no doubt that England must be very blind to her true interests if she allow it longer to remain in abeyance.

My exertions in the cause of the Euphrates Route are well known. During the last ten years I have

been twice to Constantinople, to obtain the Sultan's Firman for a Railway from the mouth of the Orontes to the Persian Gulf; and once to Syria, to examine *de novo* the country between the Mediterranean and the Euphrates. On the latter occasion I was accompanied by Sir John MacNeill and a staff of engineers, who made a most careful survey of the Bay and of the country from Suedia onwards. To my great gratification, I found myself recognised and most cordially welcomed by the Arabs, whose anxiety for the opening-up of their country had much increased since 1837. In 1857 I brought the subject before Parliament, and the efforts of Mr. W. P. Andrew, Chairman of the Scinde and Punjaub Railway Companies, have been untiring in endeavouring to organise a Line of Railway *viâ* Aleppo and the Euphrates, with such slight encouragement from Government as would give confidence and security to the shareholders. But all has hitherto been in vain—and why?

In sending forth this Narrative of what was done by the pioneers of the Euphrates Route to India, I do so with the earnest hope that it may be the means of affording me the only reward which I now covet—that of a satisfactory answer to this very simple question.

I am also very desirous of drawing the attention of the public to that portion of my work comprised in the Appendix. The Contents of an Appendix are

usually considered—by the general reader at all events—as dry and uninteresting, and are liable to be passed over without even a cursory perusal. A glance at the Table of Contents of this volume will show that this is not the case in the present instance.

The highly interesting Journals of the late Major-General J. B. B. Estcourt are replete with truly life-like pictures of Eastern manners and travel; while, to those who knew him personally, they will recall vividly the single-hearted and straightforward character which drew enjoyment and encouragement for himself and others from every incident.

Captain Charlewood's Journal abounds alike in graphic descriptions of the arduous duties undertaken by him, and evinces the cheerful and devoted spirit, ever fertile in expedients, in which they were carried out: while the Reports of the other Officers, although necessarily more brief than those to which I have specially alluded, will give the reader a clearer idea than I have succeeded in doing in my Narrative of the difficulties overcome by each in his separate department of the Service.

In Dr. Helfer's hitherto unpublished 'Visit to the Arabian Desert,' and in Mr. Ainsworth's 'Journey to Constantinople,' the antiquarian will, I trust, find much to interest him, and to encourage further research in these inexhaustible regions of ancient civilization and greatness.

To the Appendix I have added, as No. XII., short Biographical Notices of the Officers and others by whom I was, without exception, most ably seconded and supported throughout the Expedition.

I offer these Notices as a tribute of my gratitude and regard to the survivors of our little band, and as a memorial of my lasting affection for those who are no more; earnestly hoping that these records of their devotion to the Service in which they were engaged, may be the means of inducing others to do likewise.

F. R. CHESNEY, *General Royal Artillery.*

PACKOLET, BALLYARDLE, CO. DOWN:
September 7, 1868.

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NARRATIVE

OF THE

EUPHRATES EXPEDITION.

CHAPTER I.

INTRODUCTORY:
THE NILE BOATS AND EARLY NAVIGATION.

CHAP. I.

Vols. I. and II.

In the year 1852 I published, in two volumes, an account of some of the results of the Euphrates Expedition, including an historical and geographical survey of the regions traversed by the Euphrates. It was my intention that the work should have included a full narrative of my first exploration of the rival routes through Egypt and Syria, as well as a detailed account of the operations of the subsequent survey; and in the prospectus of the proposed work, which was published by Messrs. Longmans in 1852, this intention was sketched out and given to the public; but it appearing, to the Department * under whose auspices the publication was conducted, that the completion of my design would be attended with what then seemed to be an undue expense, I consented, at their instance, to limit the work to the incomplete form in which it then appeared.

* Her Majesty's Treasury.

CHAP. I.

Proposed completion of the work.

After the lapse of sixteen years, it is now thought advisable by Her Majesty's Government, having regard to the greatly increased importance of the Overland Route question, that it would be for the public advantage that the materials of information remaining in my hands should be rendered accessible, and I have received their commands to proceed with the present work. Owing to the march of events in the meantime, much of what I had originally prepared for the press has ceased to possess sufficient interest to justify its production at this day; so that—partly from this cause, but chiefly on account of the change necessitated in the general plan of the work by the above-mentioned determination of my superiors—it is probable that what I now offer to the public may appear, in some instances, deficient in continuity of treatment. But defects of this kind will readily be excused, if the work be found useful in carrying out that continuity of *purpose*, which for nearly forty years has actuated me, in seeking for, and endeavouring to make known, the preferable Overland Route to India.

The Suez Ship Canal.

Of the events above referred to, the principal one is, undoubtedly, the great undertaking of the Suez Ship Canal of M. de Lesseps. A commercial nation ought not to repine at the opening of any new highway of commerce; but a nation administering a distant empire, cannot afford to trust her communications to the chances of commercial equality, which may at any time be disturbed by national or dynastic rivalries: and while the Suez Ship Canal deprives the Egyptian and Red Sea Survey of much of its interest, it must be regarded as having added greatly

to the importance of such information as can be adduced in respect to the rival line through Syria.

Railway from Suedia.

The proposed railway from Suedia, at the mouth of the Orontes, to Antioch, affords another and a very cogent reason for turning with renewed interest to the Euphrates Route; and even the increasing apprehensions of disaster to the Turkish Empire—although I trust illusory, or at least very remote—furnish further grounds for a just and natural desire to secure a firm footing in those regions; and to that end to make ourselves fully acquainted with all that we have done there, and with all that has been learnt of the land and people.

Intended record of the officers services.

Besides, it seems due to the gallant and meritorious public servants who took part in the Survey, and are now no more, that some record of their services should be preserved, both as a tribute to their worth, and as a useful instruction to those who hereafter may have similar undertakings confided to them. I, and a few others, are now the only survivors of a considerable force engaged in an enterprise requiring much preparatory organisation, and continuous labour in execution. I wish to commemorate them as their merits deserve, and yet, in doing so, not to have to say, 'fungar inani munere.' It seems also desirable that my own preliminary examination of the River Euphrates should not be withheld from those who may be interested in knowing what a single man may be able to accomplish in the way of field and water surveying and exploration. I shall therefore narrate, as briefly as may be, the steps which led me in the track of what will probably, hereafter, be our great

CHAP. I.

highway to the East; and shall then give the details, first, of my own operations as an individual surveyor, and, afterwards, of the operations of the Euphrates Surveying Expedition, under my command.

Mr. Peacock's queries about the River Euphrates.

Being in Egypt, whither I had gone on a political mission from Sir Robert Gordon, the British Ambassador at Constantinople, in 1829, I had placed in my hands, by Consul-General Barker, a series of queries drawn up by the late Mr. Peacock, the Principal Examiner of the India House, as to the relative advantages of the Egyptian and Syrian routes to India. This document, for its comprehensiveness, sagacity, and forethought, deserves to be made known, and I give it here *in extenso*:—

Object and nature of the Euphrates enquiries.

'Information respecting the road from Scanderoon to points in communication with India—*i.e.*, from that place as well as from Lattaquia and Antioch, respectively, to Aleppo.

'From Aleppo to Bir, and to Beles on the Euphrates.

'The number of days required to perform the journey by each route, distinguishing between a journey to be performed by travellers with attendants, and one by an express messenger.

'The comparative advantages of one or other of these routes, both as regards the probable security of travelling by them, and the superior expedition to be obtained.

'Trade on the Euphrates; extent of it; in vessels or boats; their size and draught of water.

'At what point the navigation ceases.

'At what point (if any) below Beles it would be possible to procure wood in sufficient quantity for steam-navigation.

Capt.n R. Moresby, R.N. del. T. Picken, lith.

Pub.d by Hogarth Lith.rs to the Queen.

'State of the tribes on the sides of the Euphrates, particularly the right side.

'To what point might a steam-vessel mount the Euphrates?

'State of the harbours of Lattaquia and Scanderoon, and also of the mouth of the River Orontes.

'Route from Aleppo by the Great Desert to Bussorah, and also by the Little Desert to Bagdad.

'Information as to the number of days, means of obtaining despatch, and general security for travellers.'

Strongly impressed with the importance of these questions, I ventured to propose to our Government, through Sir Robert Gordon, that I should make a personal examination of the several routes, and report the result. Taking for granted that this would be the wish of the Government, and that no difficulty about leave would be made, I at once commenced the task I had proposed to myself, by ascending the Nile to Cairo, and thence crossing to Suez, and from Suez descending the Red Sea to Kosseir. From Kosseir I crossed the desert to the Nile at Kenneh, ascended to the Second Cataracts, and returning, descended the river to the Damietta mouth. It is hardly necessary to say, that many things incidental to desert travelling, and to sea and river navigation, occupied my attention, which possibly would have been deemed matter of curiosity, if not of value, thirty-nine years ago; but beyond the general result of my observations—viz., that a steamer might reach Kosseir from Bombay in fourteen days, and that the transit of the mails from thence to Alexandria could be accomplished in four

Examination of the Red Sea and Nile.

CHAP. I.

days ; while by the shorter line, Suez would be reached in fifteen days from Bombay, and the Mediterranean at Damietta, or the entrance of the Nile, in two days more—there is little of what I took note of in the Egyptian part of my exploration, that has not now become familiar through the writings of recent travellers, as well as from actual observation by great numbers of our civil and military servants, in the course of their journeys to and from India.

Some few observations, however, may be worth making in relation to the Nile itself, which plays an annual part in the affairs of mankind too important to allow it ever to be a worn-out subject. It seems difficult to conceive that such a civilisation as formerly existed along its banks up to the frontiers of Abyssinia, should have been wanting in the necessary enterprise to trace the river at least to the lakes constituting its head-waters. The geographer Ptolemy indicates the fact that two great lakes were known to be in existence, at the upper sources of the Nile, in his day. Mediæval geographers bring down these two lakes in the maps of Artelius and Cleaver, and show them at some distance beyond the Equator, gathering the snow-waters of the Mountains of the Moon. The remark of a sagacious observer, that the gradual rise and fall of the Nile could only be accounted for by a great expanse of head-waters, was, at the time I write of, fully before my view ; though I did not foresee that, before I should come to put the result of my own observations on paper, his inference would be verified by the discovery of the eastern lake by Speke, and of the western lake by Baker. After all, it is not a little remarkable that, save as regards

Early civilisation of Egypt.

the survey of the farther shores of the Victoria Nyanza, the discoveries of these two able travellers have done little more than restore us to pretty nearly the same measure of knowledge as was enjoyed by the Roman world of the time of Nero. That Emperor sent two centurions into Ethiopia, with orders to explore the unknown fountains of the river. They reported that, after having gone a long way, they came to a king of Ethiopia, who furnished them with necessaries and recommendations to some other kingdoms adjacent; passing which they came to immense lakes, of which nobody knew the end. But I must except the conclusion of their report, for they added, with regard to the end of these lakes, that nobody could ever hope to find it; and now—possibly before what I write shall have come before the eye of a reader—some other adventurous traveller will have fully surveyed the farther shores of the Albert Nyanza, and will have determined whether or not there was any foundation of truth in what the Sacristan of the Treasury of Minerva at Laïs told Herodotus,* that one part of their head-waters flows north through Egypt, and the other half south, through another channel; an idea very perseveringly insisted on by the mediæval geographers, who derive not only the western branch of the Nile, but also the waters flowing into the Gulf of Congo, from the opposite extremities of their Lake Zamhe—being unquestionably the same inland sea reintroduced to our notice under the name of the Albert Nyanza. However these speculations may turn out, no one, even at the period of which I write, could

Sources of the Nile.

Future geographical discoveries.

* Euterpe, xi. 28.

CHAP. I.

travel on the Nile without feeling himself on one of the highways of knowledge, as well as of commerce; and a question arose in my mind, on observing the various modes of navigation in use on its waters, whether the Nile-boat, with its fore and aft lateen-sail, and its capability of going on a wind, be not a much older form of sailing-vessel than we have been in the habit of supposing: for the prevalent belief is that the vessels which sail on a wind are of post-Roman invention—and, indeed, there seems no doubt that the Roman galley was calculated only to sail before the wind, and had to make head against it by force of rowing.

Nile-boats.

Now everything in Egypt preserves the ancient type. Such a thing as a square-rigged craft is not to be seen on the Nile. We know that the Celtic Gauls of Julius Cæsar's time possessed boats with leathern sails capable of going on a wind. The least civilised tribes of the Eastern seas use the lateen rig, more or less modified. I confess that I could not look on the almost universal use of this sail on the Nile—for you see it even on the rafts and flat-bottomed barges, in which hay is carried from point to point—without the conviction that navigation had attained here to as early an excellence as the other arts. The lines, too, of the Nile-boat doubtless preserve the form fixed on thousands of years ago, as that best fitted for passing through the water, and at the same time yielding least to leeway; and it is remarkable that the principal breadth of beam is carried abaft of the centre, giving to the deck much the character of that of the celebrated yacht 'America.'

Early river navigation.

Side by side with these vessels we see the most

Floats, rafts, &c.

primitive forms of floats and rafts—such as two bundles of bulrushes lashed together, and guided by a single individual from place to place, who uses his feet as paddles. A better kind, again, is formed by lashing together two or more logs of wood, which can then be paddled across, or down the stream. Others, which are merely temporary rafts, but answer the purpose required very efficiently, are constructed of huge earthen water-pots,* or sometimes of a great number of earthen drinking-cups, attached together by reeds. These, when conveyed to their destination, are broken up and sold, and are universally used throughout Egypt as drinking-cups; and being porous, the water which filters into them is deliciously cool and refreshing.

And now, side by side with these primitive floats, the European steamboat is joined to the other examples, so that navigation may here be seen in every stage of its progress. Let me recommend the Nile-boat to the traveller, as a far more quiet and convenient dwelling than a steamer. There are several sorts—two of which, even at the present day, may be described with advantage. These are the *dáhábieh* and the *canjiah*. A first-class *dáhábieh* is from 160 to 180 feet long—with two masts and two immense sails of striped cotton, each of which revolves on a pivot at the head of the mast. These boats have two, and sometimes three, roomy cabins, furnished with sofas, tables, bookshelves, &c.; also some two or three

Boats on the Nile.

* Florus, in his account of the Servile War, relates that the insurgents under Spartacus, after being driven into the extremity of Calabria, by Licinius Crassus, and having no shipping, endeavoured to cross the Straits of Messina on rafts composed of jars lashed together by wicker-work, 'dolia connexa virgultis.'—*Epitome*, vol. ii. cap. 20.

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comfortable sleeping apartments, provided with jalousie shutters. The poop-deck is the traveller's great resort after sunset; the skylight makes a table, and there is always a sofa on each side of it. The crew consists of the rais, steersman, and twelve or fourteen sailors, who cook and live towards the bow of the boat, leaving ample accommodation for the travellers and their servants.

The *canjiah* is a good deal smaller than the *dáhábieh*. They vary from 40 to 90 feet in length; that in which I navigated the Nile was 70 feet long. Their build is a sharp raking bow, rather a flat bottom, a full stern, with a double cabin, and three small sleeping cabins beneath a poop-deck, which occupies quite one-half of the boat. A low mast with a sprit-sail at the very extremity of the stern, with a much higher one towards the bow, with a huge lateen-sail of blue-and-white striped cotton, worked on a pivot at the head of the mast, and extending the whole length of the boat, form the universal rig. This rig is so exactly represented on the Pyramids and ancient sculptures, that it is clear the present boats differ but little from those anciently in use on the river. Nothing can exceed the luxury of floating down the Nile in one of these boats, carried by the current from temple to temple, the surface of the stream scarcely rippled by its progress, and enjoying the silvery light and soft balmy atmosphere which succeed to the heat of an Egyptian day.

Besides examining the Damietta mouth it was part of my duty to survey the Isthmus of Suez, and the outlets through Lake Menzalah, with a view to report-

ing on the practicability of carrying out the great project of a ship-canal, the first suggestion of which in modern times we owe to the *savants* of the French Republic, whose countryman (Lesseps) now bids fair to reap the glory of the accomplishment.

Owing, however, to some serious errors in taking the line of levels in 1802, the French engineers had made the Red Sea 36 feet higher than the Mediterranean; and at the time of my observations, the belief prevailed that if the isthmus were to be pierced by an opening from sea to sea, several towns along the shore would inevitably be submerged. This error I was enabled to avoid, and in the report which I addressed on the subject to the British Minister at Constantinople,* I ventured to express my belief that a sea-canal could be opened, so as to give a passage for steamers and other vessels, without even so much disadvantage as is experienced in the case of the Bosphorus.

Question of the Suez Canal.

The practical question, however, appeared then, as now, to be one of expenditure; and considering the enormous cost, on the one hand, and the certainty of a speedy overland communication being established across the narrow desert between Cairo and the Red Sea on the other, the possibility of constructing a ship-canal to Suez did not long continue to occupy my thoughts. They were now turned towards the alternative route through Syria and Mesopotamia, the exploration of which had next to be entered on.

* Letter from Jaffa, September 2, 1830, Appendix No. 1.

CHAPTER II.

OUTLINE OF A JOURNEY THROUGH PALESTINE AND SYRIA, WITH REFERENCE TO AN OVERLAND ROUTE TO INDIA.

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I QUITTED the scene of my recent enquiries with the most agreeable and enduring recollections. Other countries may and do interest the traveller deeply; but to the historian, the architect, or the archæologist, Egypt presents unrivalled attractions; nor are these lessened by the fact that the traveller enjoys there every kind of comfort, coupled with a degree of serenity, nowhere else to be experienced out of British territory, in the East.

Very different conditions awaited me in the countries through which I was now to carry on my mission of exploring the route by the Euphrates.

From Egypt to Jaffa.

Arrived at Jaffa, I devoted a short time to reporting the results of the Egyptian investigation, which are explained in the letter to Sir Robert Gordon, above referred to; and then proceeded on a preliminary journey, with a view to becoming acquainted with the general aspect and condition of the district lying between the Euphrates and the Syrian coast of the Mediterranean.

The queries under which I was acting,* pointed out

* Chap. I. pp. 4, 5.

two principal lines of communication between the Syrian coast and the Euphrates—viz., from Jaffa to Damascus, and on to Palmyra and Anna, and from the Bay of Antioch and Aleppo to Beles; and the comparative shortness of the route from Scanderoon to the River Euphrates (which in that latitude approaches to within 120 miles of the Mediterranean) indicated this third point as the one offering the greatest facility for the transport of boats, as well as the means of examining the river in its greatest extent. My design was, after making a careful examination of the old tracks of caravans by Aleppo and Damascus, to proceed to Scanderoon, and thence to carry a couple of boats across to Bir; for, at first, I did not entertain the idea of crossing that part of the Desert of Arabia which I should have traversed if I had proceeded to the Euphrates by way of Palmyra, and I only contemplated at that time a passing exploration of the regions to the east of the Dead Sea.

Proposed examination of Northern Syria.

The harbour of Jaffa, the Mediterranean terminus of the ancient lines of commerce, was first examined, so far as to justify the subsequent proceedings taken, by direction of the Government, for its survey.

Visit to Jaffa and the Holy Land.

Thence I visited Jerusalem,* the Dead Sea, Hebron, the Jordan, and, as I proceeded northward, Mounts Tabor and Carmel, the fortress of Acre, the towns of Nazareth, Tiberias, Sidon, the remains of Tyre, and so on to Beïrút. Thence, taking a fresh departure, I passed, soon after leaving the town, the place tradition-

* I had originally intended giving to the public my examination and attempts at verification of the different sites of interest, both in Jerusalem, and to the eastward and westward of the Holy City; but this will now be done, in a much fuller and more satisfactory manner, by the officers of the Royal Engineers, engaged in scientific researches in Palestine.

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ally connected with the prowess of St. George and the Dragon, and I was shown the blue clay, &c., on the spot where the renowned Champion washed his hands, after slaughtering the terrible beast. About three hours' travelling from hence, along the coast, brought me to the river Nahr-el-Kelb; and having examined the five remarkable tablets on its banks, as well as the rock-excavations, I continued the ascent of the wooded slopes of the Lebanon. My anxiety to visit some remains mentioned by Burckhardt led, in this part of my journey, to an adventure with part of an Arab tribe, which I mention, as illustrating in some respects the habits of this singular people. I had quitted the banks of the Nahr-el-Kelb, in the upper part of its course, and had inspected the two pyramids of Fakkra,* its ruins and temple, also those of Heusn Niéha, with its temple, of which four gigantic columns still remain. There are also other ruins of interest in this vicinity, as well as some remarkable excavations in the face of the rock, about two miles from Farsala; but the leading object of this excursion was, as I have already mentioned, to examine certain remains, said to be found in the country of the Mitauli Arabs, on the face of Jebel Bekr.

Relics of St. George.

Pyramids of Fakkra.

Full of the expectation and excitement of confirming Burckhardt's discoveries in these mountains, I commenced the ascent, believing that my dragoman (Anastasius) and our muleteer were following me, as usual. I was too much occupied with my own object to perceive that they had thought it more prudent to avoid this part of the excursion; and it was not until seeking shelter from rain under a wide-spreading carob,

Visit to the Mitauli.

* See Plate, Vol. I. p. 473.

or locust-tree,* when I had almost reached the summit of the lower range, that I found, to my surprise and annoyance, that I was not only quite alone, but without even the usual protection of my gun, which I had, unfortunately, left with the baggage.

At this juncture an armed Arab chanced to come up, and, in answer to my enquiries, made signs that he would guide me. Shortly afterwards another individual appeared on foot, accompanied by five others on horseback. They at once seized my wine-flask, but he who tasted its contents spat it out, with much apparent indignation on discovering what it was. They next ordered me to mount my horse and accompany them. I explained, as well as my scanty Arabic would permit, that I was waiting for my dragoman; on which the man on foot, whose red beard and forbidding countenance are still well remembered, drew his sabre, and, with menacing gestures, flourished it over my head. All this I endeavoured to treat quite as a joke, until I perceived that my friend was about to give force to his sword-arm. An active spring backwards took me out of the immediate reach of his weapon, and I at once submitted, and showed that I was ready to accompany the party. On this they held a consultation, the result of which was an onward movement, which brought us to a valley leading to the westward. Two of the party kept rather in advance, but my friend the Kuzzilbash (red-beard) and three of the mounted men remained as my guards: the seventh was employed in driving three heifers, which had just been appropriated as booty.

Arab threats.

* The *Robinia Pseudacacia*, which, as the *Ceratonia Siliqua*, is famed in the South of Spain, and also in the Levant, where it is of large size.

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My suspicions were fully aroused as we wound through the valley, the picturesque beauty of which would have been more appreciated under other circumstances; at that moment, the fear that my life was in danger was uppermost in my mind. As we proceeded, the Arabs called upon me, two or three times, to show them where gold could be found, and showed, by unmistakable gestures, what would be the consequence of my continued refusal to enable them to discover the supposed hidden treasure.

Question of finding gold.

I shall not attempt to recall my alternations of feeling during the following part of this (to me) eventful day; but I distinctly remember that the hope of extricating myself in some way from my unpleasant position rose above my naturally painful apprehensions, and one means of escape presented itself to me in a small double-barrelled pistol which had remained unnoticed beneath my loose jacket. It would not have been very difficult, at one of the sharp windings of the valley, to get rid of those who had planned and (as I afterwards ascertained) had actually determined to take my life. But I could not bring myself to decide on shooting my captors unawares; and thus we proceeded until, towards the termination of the valley, they took me aside into a small mountain-basin, in which they could neither see nor be seen, excepting by some one near the crest of the overhanging mountain. Here the two Mitaulis placed themselves at a short distance on each side of me,—dismounted,—drew their ramrods, and proved the charges of their carbines.

Temptation to shoot my enemies.

The thought crossed my mind that I might yet escape by ascending the steep hill—which I could do, on foot,

more rapidly than the horses—and the chances of their being able to hit a moving object were in my favour; but the wiser course seemed to be an attempt to rouse their compassion, by placing my life and money at their disposal. For an instant they seemed moved; but the compassionate impulse passed away, and my last hour seemed all but come, when He 'who neither slumbers nor sleeps' ordered it otherwise. A Providential deliverance. Syrian peasant descended the side of the mountain, and actually entered the basin where we were. His appearance at once changed everything: not only the hostile action of the two Mitaulis, but even the fiendish expression of their countenances, gave way to that of *seeming* peace and goodwill. The peasant evidently guessed that all was not right, for he not only attended to my appeal, by consenting to remain with us, but offered me the usual symbol of peace, a bit of bread—which served the double purpose of reassuring me, and of furnishing me with the means of testing the intentions of the Mitaulis. After some difficulty the elder man took the bread; the younger, after repeated solicitations on my part, followed his example, but spat it out with much indignation, as if it would have choked him.

This little episode over, we moved on, still in a westerly direction, the friendly peasant continuing with us, and soon overtook the advanced portion of our party, between whom and my companions there evidently existed no friendly feeling. It occurred to me that I might turn this mutual distrust to good account; so, producing the Sultan's firman, which they placed on their heads with many demonstrations of respect, I

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proceeded to rouse their cupidity, by displaying before their longing eyes my bag of money—which, being filled with gold pieces largely mixed with copper, made a great display—and was eagerly greeted with the expressive 'Mashallah!' from every mouth, and cries and gestures of surprise and delight. I was at once told to put up my money, which had increased their mutual distrust, to an extent which at once showed itself in wrangling and bitter irritation to a great extent. The storm, however, subsided without bloodshed, and it was proposed that I should decide to which party I would belong. There were only three on one side, who were the people of Mitre, four on the other belonging to the village of Akoura. I was now in a great strait, but I had broken bread with the people of Mitre, which weighed in their favour; my friend the peasant also seemed inclined to remain with them, and the Akoura people were less well known—all which considerations turned the scale in favour of the smaller number, with whom I moved on towards Mitre. The disappointed majority persisted in remaining near us, giving us no little annoyance, and evidently ready to be still more troublesome, and the apprehension of an attack from them only ceased when we entered the little town of Mitre.

Embarrassing situation.

Reach Mitre.

The chief of our party, an old man, was received by the inmates of his house with affectionate greetings, and showed no little anxiety to induce me to place my baggage under his roof. But, as I did not quite see the desirability of this arrangement, I remained sitting on a wall outside, until it occurred to me to make my way, leading my horse, to the Sheikh, from whom, after

showing him the Sultan's firman, I obtained an unwilling and somewhat doubtful promise of protection. My disappointment, however, at this moment was great, on finding that my valuable ally, the peasant—no doubt considering that I was now quite safe—had slipped away quietly, and my best efforts failed to find out the man to whom I owe more than I can express.

Arrival of my servant and horses.

Later in the evening, Anastasius and the muleteer made their appearance at my halting-place, the Sheikh's stable, full of excuses for their misconduct, which had been so far redeemed, that they had ventured on after ascertaining that I was safe at Mitre. Their arrival provided me with the means of getting supper, and also brought me my gun, which gave me a feeling of confidence, notwithstanding my isolated position, among people who were the terror of this part of Syria. Still it was a question whether I could proceed with safety, until the Sultan's firman caused the Sheikh to furnish me with a reliable guide, with whom I set out for Tripoli the next morning, and the magnificently bold scenery through which I passed caused the excitement of the previous day's journey to be almost forgotten.

Leave Mitre.

River Akoura.

A steep descent of the mountain slope brought me to the rapid River Akoura, by the side of which my guide and I found a passage cut through the rock, with a spacious cave adjoining it—partly artificial, and partly natural. Here we had our last sight of Mitre, and of the mountain-side, the scene of the previous day's adventure. Several villages were passed, as we advanced along the wooded slopes of these mountain valleys, in one of which we came upon the ruins of the Temple of Naon; and we reached Tripoli in the afternoon,

Temple of Naon.

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just as a bridal procession was issuing from the Convent of St. Demetrius.

Conduct of the Mitaulis made known. The Sultan urged to spare their lives.

From Tripoli I despatched, through the Consul, an attested statement of the conduct of the Mitaulis, which was so seriously taken up, that I appealed to the Sultan to spare the lives of the offenders, and terminated this affair, so far as I was concerned, by the dismissal of Anastasius and the muleteer.

Tripoli.

Tripoli possesses a remarkable castle, and its environs are interesting. A good road—a rarity in Syria—to the westward, leads the traveller through woods of oak, pine, and rich mulberry plantations, to the village of Eden, a very picturesque spot, situated amidst alpine scenery, diversified with convents, and numerous villages on the mountain slopes. A ride of eight or nine hours onward brought me to the far-famed Cedars of Lebanon, nine of which still remain in a very sheltered mountain hollow, in which their prodigious trunks are nearly hidden by the rich foliage of their pendant branches.*

The Cedars of Lebanon.

Return by Ba'albek to Damascus.

To these reminders of the great works of Solomon and Hiram followed a visit to Ba'albek, once the City of the Sun—also that of Baal, the Baalath of Solomon,† and the site of the palace built by this monarch for the daughter of Pharaoh.‡ The examination of these great remains, which have now been too well described by modern travellers to need any addition from me, was followed by a journey to Damascus, with a view to other enquiries.

* For a plate of the Cedars, see vol. ii. p. 389 of 'Euphrates Expedition.'

† 1 Kings ix. 18; 2 Chron. viii. 6.

‡ Vol. i. p. 84 of 'Benjamin of Tudela,' by A. Asher.

CHAPTER III.

OUTLINE OF A JOURNEY, THROUGH THE HAOURAN AND DECAPOLIS, ON THE WAY TO THE RIVER EUPHRATES.

ON reaching the Syrian capital, with the intention of continuing my journey to the eastward, I found, to my serious disappointment, that there was no immediate possibility of getting onward to Scanderoon, from whence I proposed conveying two boats across the country, in order to form them into a raft, to navigate the Euphrates. This part of my plan being thus frustrated, I thought that this inopportune delay might yet be turned to good account, by an examination of the countries lying eastward and westward of the River Jordan, especially as I found, from a communication received from the Foreign Office, that it had been proposed to Government that the mails should be carried from India as far as the town of Hit, and from this place, across the country, to one of the ports on the Mediterranean coast—such as Beïrút, Tripoli, or Sidon, &c. Having received a copy of Consul-General Farren's letter on this subject to the Foreign Office,* I felt that there was now an opportunity of ascertaining whether any such preponderating advantages could exist as would compensate for a long land-journey from Hit, instead of the shorter and easier ascent of

Proposed examination of countries eastward of the Jordan.

* October 16, 1834, to the Secret Committee of the Honourable East India Company, through the Foreign Office.

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the river to the neighbourhood of Aleppo. With the assistance of the acting French Consul (M. Baudin), my preparations were soon made; and Mr. George Robinson, who happened to be then travelling through Syria, was quite ready to join me. As the best means of accomplishing our object, we enlisted the services of a travelling apothecary, Sheikh Woofa, who, in his capacity of a wandering practitioner, was well acquainted with the people of the country through which we had to pass. Horses and other necessaries provided, we started from Damascus; and although untoward circumstances greatly curtailed our plans, we still managed to visit a considerable portion of the country lying to the eastward of the Dead Sea. Anxious, however, to carry the reader on to the great object of my journeys, and of this work—the descent and navigation of the Euphrates—I shall merely enumerate here a few of the places visited in the Decapolis.

A fellow-traveller.

Sheikh Woofa.

Start from Damascus.

Directing our course to the southward, on quitting Damascus, our first night's halt was at El Kessouan; and passing from thence by Deir Ali, we arrived at Missema the next afternoon, where many remains and inscriptions mark the site of ancient Phenesus. Onwards a winding path brought us after dark to an Arab tent, where we were hospitably welcomed, and which we found next morning, to our surprise, formed part of an Arab camp, which was ensconced in one of the sinuous openings of the singular pathway, which winds in concentric curves through vast masses of volcanic rock. The egress from this camp was so difficult, that it required one of the tribe to guide us out through the succession of winding passages, which at every turn

El Kessouan.

Missema.

Hospitable reception.

seemed to be altogether closed. At length, however, we were clear of the rocks, and passing a stony plain, we halted at Shaara, where about a hundred Christian and Druse families still occupied a portion of the remains of a once considerable city, which is now surrounded by an almost continuous rocky waste, bearing however, at intervals, marks and remains of its former populous condition. Shaara.

On quitting Shaara, we passed the ruins of two towns both bearing the name of Orēb, and going onward, by the inhabited villages of Hubab and Zebel, we halted at Keratha. A castle and a large square tower are still in good preservation amidst these remains, which contain many Greek inscriptions. Having copied several of these, our onward journey was resumed; and having visited the extensive remains of Shagga, we halted for the night at Zarava, or Ezra. This must at one time have been a considerable city, since its various temples and other buildings still occupy a space of about four miles in circumference. The present inhabitants, who are chiefly Greeks, and few in number, occupy some of the ancient buildings, which, being substantially constructed of stone, are still in a complete state of preservation. Keratha. Ezra.

Having completed our examination, and copied some of the numerous Greek and Arabic inscriptions which we found, a visit to the ruins of Sour followed; and passing onward by the villages of Assim and Louban, we halted at Deir Dhami. It was almost dark when we arrived at the Bedouin camp of Salé, in the vicinity of this place, which consisted of some 20 tents, to which bright lights guided our steps, and here we sought the usual Deir Dhami.

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hospitality. This, however, was given by the Sheikh with evident reluctance, owing, as we discovered, to the apprehension of an attack from a neighbouring tribe. But this first difficulty being overcome, our host consented to conduct us to some of the neighbouring ruins. Daylight showed that we had entered quite a labyrinth of rocks; but under the guidance of our now willing host, Mr. Robinson and I were enabled to examine Deir Dhami and other ruins of interest, after which we resumed our route, although our animals had been left without food.

Leave Salé.

Taking an easterly direction, on quitting Salé we found the passages towards Om Ezultūm so sinuous, and so much circumscribed by masses of rock, that even our guide at one time halted, and looked round almost in despair of finding an exit. His uncertainty, however, was but momentary, and a more open road was speedily found. During the four hours which were occupied in going through this singular district, the ruins of Boyer were seen at intervals through this wilderness of rocks, between which the scantiest patches of cultivation occasionally appeared. Some little distance onward, we came, on the declivity of Jebel Haouran, to the remains of Soueda, with its numerous inscriptions; and passing subsequently remains of other cities, we halted for the night at Om Ezultūm. Next morning we visited the temples, cisterns, and other remains of this once extensive city, which now scarcely contains thirty families of Druses; and then rode on to Shobba, now the principal seat of this singular people. Here we found a theatre, some temples, cisterns, and numerous strongly-built

Om Ezultūm.

dwellings, some of which are occupied by the present inhabitants. At Zimri, in the immediate vicinity of this place, we saw the remains of a Doric temple, and those of a spacious square tower, from which the extensive ruins of Shakka were visible. About two hours' distance from the latter place we came, unexpectedly, upon the small but beautiful temple of Salem, on the front of which is a long Greek inscription, which we copied, and then ascended the western side of the adjoining hill to Kanouat.*

Doric temples of Zimri

and Salem.

The ancient upper as well as the lower town are here quite distinguishable, while the remains of temples, palaces, theatres, and churches are very extensive. There were also numerous broken statues, several tombs, columns, and one or two very massive buildings, which were all but hidden by luxuriant oaks.

Town and ruins of Kanouat.

From Kanouat we visited the columns and other remains of Aatyl, and then went on to Soueda, the ruins of which cover a space of nearly four miles in circumference. They are partially inhabited by Druses. Passing by Ezra, travelling over a plain of rich black soil, we reached Miniken in the evening, where it had been arranged that we should meet our Arab escort.

Remains of Aatyl and Soueda.

Miniken

The Sheikh received us with more than doubtful hospitality, and our intended guide, who we ascertained had arrived at the camp, did not come to our quarters, which had a suspicious appearance. It was with difficulty that we obtained sufficient space in a cattle-shed to lie down for the night, while we had to depend on what our saddlebags could furnish in the way of food. However, late in the evening, the Arab chief

* Kenath: Numbers, xxxii. 42.

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Hattib appeared, and, after a good deal of difficulty, he agreed to conduct us (by Jerash and Souan) to Petra, in order to proceed from the latter place round the Dead Sea. For this service Hattib was to receive 600 hard piastres; and as he was in the habit of conducting the pilgrims to Mecca, our arrangements seemed most satisfactory, both to Mr. Robinson and myself. Sheikh Woofa, however, no doubt thought otherwise, for he suddenly announced to us that the services, which he had performed so faithfully, were now to be at an end; and he turned his steps homeward the next morning, after being well compensated for his trouble, while we continued our projected journey, although, as the sequel proved, with sadly misplaced confidence.

Agreement with Hattib.

Sheikh Woofa leaves us.

We passed the villages of Ham and Botta, and halted for the night at Daal. We all occupied one spacious apartment; the Arabs arranged their lances and other arms along the walls; coffee was served, followed by the usual pilau of boiled wheat, in the shape of a little pyramid, with small pieces of broiled meat scattered over its surface. Some sixteen hungry individuals, after passing a little water over the fingers of the right hand, hastily squatted round this ponderous dish, and its contents speedily disappeared. Another dish of the same size being brought, a second set of Arabs took the places of the first. A third party now came, and finally a fourth. When all had supped, and were seated along the walls of the apartment, coffee was again served all round; and the evening meal being thus completed, Hattib produced a primitive guitar, and his barbarous attempt at music concluded our first evening's entertainment, after which all settled themselves to rest for the night.

Daal.

An Arab supper.

Whilst preparing to depart early next morning, a slight meal was brought, consisting of some poor vegetable broth called *chouba*, with bread freshly baked on a girdle, and a little thick sour milk (*yaourt*). Our meal was followed by the usual bustling scene of mounting; and quitting Daal, we resumed our desert journey, during which we had ample time and opportunity of becoming acquainted with the composition and capabilities of our Arab escort. Some of our party were armed with the *djereed* or dart, others with pistols or matchlocks; many had sabres, and nearly every individual had an Arab spear, which, having a bamboo shaft or handle, is peculiarly light and very manageable. This is quite eight feet long, and has at the lower extremity a spike, to strike into the ground on halting, and at the other a short spearhead, protruding beyond a fringe of either black or white ostrich-feathers. Our Arabs, as we ascertained subsequently, belonged to the Aniza tribe, and each was mounted on a handsome mare, and had a sleeping-rug made of very thick cloth, which in the daytime was rolled up and placed behind his saddle. With the exception of our leader, who wore a rich silk dress under a handsome white bournouse, Hattib's people had the usual striped cloak, and a handkerchief placed over the head with the two corners hanging down, and kept in its place by means of a turban of rolled woollen thread, which is so peculiarly Arab. The whole party were evidently animated by joyous feelings, as we moved onward over a bare undulating country, though with good soil.

Quit Daal.

Arms and equipments of the Arabs.

Their dress

Having passed the ruined castle of Hudhr, and afterwards the two villages of Mezira, the spirits

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of the children of the desert gave rise to a most lively scene; and what had hitherto been an orderly march, very cautiously conducted, with two scouts in advance, and others moving in parallel lines on the flanks, became quite an exemplification of desert warfare. In one case, some five or six, with their lances firmly at rest, and projecting three or four feet in front of their horses' heads, were seen advancing at full speed; but just when on the point of meeting those who awaited their onset as enemies, they suddenly brought up, by throwing their horses on their haunches; and whirling round at the same instant, they retreated with all speed, and continued to do this pursued by their enemies, till such a position was reached as enabled them to halt and face about to defend themselves in turn.

Desert warfare.

Elsewhere on the plain another, and no less interesting, exercise was going on at the same time—that of hurling the *djereed*. This performance is, in reality, the tournament of the desert, knightly prowess being here represented by the skill and activity of the Arab. He goes at full speed till close to his supposed enemy, when, having hurled his weapon with great impetus against the foe, he wheels about without even checking his steed, and gallops away, closely pursued by the party attacked. A few hours after these interesting displays of Arab skill, we entered that part of the country which represents ancient Bashan. Now proceeding along the eastern limits of the latter territory, and passing the remains at Daal, we halted at Draa (once Edrei), which place having been taken from its

An Arab tournament.

Bashan.

giant masters by the conquering Israelites,* the land became 'desolate from all that is therein.'† Here we found an extensive cistern of 120 yards long by 64 yards wide—also part of an aqueduct and other remains, which cover a space of about three miles in circumference. The modern buildings are a mosque (which had once been a fine edifice), a bath, and numerous dwellings, generally in a ruinous state. We remained at this place the whole of the next day, and during this enforced delay I set out to visit Mezerib, which was likely to be interesting; but my intention was frustrated by Hattib, who followed me, promising that I should have another opportunity of going thither, but that I must now return.

Ruins of Edrei.

We left Draa still with the firm belief that Hattib was about to complete his engagement, and under this impression our journey was continued to the southward. Two Arabs were always stationed on each flank, and two in advance; whose figures were particularly conspicuous as we followed them over the bare swelling hills, which are well suited for sheep-pasture. Leaving the round hill called Jebel Hadra about a mile to the right, we bivouacked in a narrow valley, containing chiefly silver poplars. Here, after picketing horses, and making a light supper, the Arabs covered themselves, the head especially, in the portable sleeping-rug,‡ which each had brought behind his saddle; and all were speedily sound asleep.

Onward from Draa.

Arab order of march and bivouac.

The result of my remonstrances with Hattib, about

* 'Og the king of Bashan and all his people went to the battle of Edrei.' (Numbers xxi. 33.)

† Ezekiel xii. 19.

‡ These rugs were of very thick cloth, like that known as wad mill tilt.

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quitting the direct line through Mezerib, had not been altogether satisfactory to me; and I therefore took advantage of the bright moonlight, while all our people were sunk in sleep, to ascend the adjoining hill, and take bearings of Mezerib, Szalt, Bozra, and other places. But when I wished to retrace my steps, I could see nothing of our bivouac, which had been so judiciously placed in a nook on one side of the valley in which it lay, as to be quite concealed. It was only after wandering about for some time, that I managed to find our sleeping party.

A moonlight survey.

Our journey was resumed with daylight, and we halted a little later in another valley—that of the Nahr-el-Kasab, thick with well-grown poplars, oaks, and pines, and where quite a wood of oleanders was sparkling in the morning light. The latter, being of a convenient size, quickly supplied our Arabs with materials for two or three bright fires, round which they squatted in circles. After a brief rest, our journey was resumed, and followed at first the course of the stream running through the valley, but eventually took a more southerly direction. We passed over undulating pasture-ground covered with flocks of sheep, without seeing anything like a shepherd. Towards noon, to our surprise, Hattib suddenly turned his horse round, vociferating, with great animation, 'Amman—Amman!' while at the same moment, being on elevated ground, we made out some buildings on the distant hills, and descried, through an opening between them, a little farther on, the Nahr-Amman winding between two ranges of hills, on the slopes of which were several remarkable buildings.

Valley of Nahr-el-Kasab.

First view of Amman.

The Arabs halted, as is their usual custom, short of

the ruins, and we prepared, with great delight, to avail ourselves of this unexpected opportunity of examining them. A visit to Amman had formed no part of our agreement with our escort; but as they had brought us to its neighbourhood, we determined to propitiate them by the present of a sheep, anticipating that, during the time occupied by their feast and its preparation, we should be able to accomplish a visit to the ruins.

Arab mode of roasting and baking.

The sheep was received with delight, and they at once excavated a sufficient space to contain the animal, lighting a fire at the bottom of the hole, and placed the sheep without being skinned upon it, and then closed the aperture, covering it with sods and earth to facilitate the baking process. We subsequently learnt that this was satisfactorily accomplished, and that the roasting of the sheep occupied about two hours; while excellent thin cakes of bread were baked simultaneously, in a similar though smaller oven hollowed out in the ground.

Examination of the ruins of Amman.

While our Arabs were thus agreeably employed, Mr. Robinson and I hastened to the ruins of Amman, and to expedite matters each undertook to visit and examine a separate portion of these remains, which, as Rabboth of the Ammonites, belong at least to the very earliest period of Jewish history. My part began with what seemed to be almost the source of the stream, which runs over a paved bed, and winds onwards between handsome stone-built quays, which in some places are still almost perfect. Following the stream, between various remains on both sides, we arrived at a portion of the early city which excited all our attention. Near the left bank stood a most remarkable building, in the form of a half hexagon, the

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centre of which contains a semicircular arch and recess, while in the centre of the other two sides of the figure there is a similar recess, though of smaller dimensions than the first. A wall, lower than that of the main building, but of similar construction, is carried on some distance, and the remains of a line of columns, parallel to the front of this structure, mark the limits of what was probably, originally, a public walk, not unlike, though superior to, that of the hot wells at Clifton.

Ancient public promenade.

A little below this part of the city, there is a fine bridge, the only one still remaining; and a little farther to the west are lines of columns, which appear originally to have formed an extensive quadrangle, and to have been connected with the two theatres, on the south-west side of the stream, which constitute the most striking features of the ruins. The first of these, which occupies the side of the hill, with its opening towards the river, is 128 feet in diameter, exclusive of the depth of the seats, of which there are 42 rows, all of cut stone. These are in three divisions, with fourteen rows of seats in each, access to every place being secured by means of passages, and sloping galleries at intervals. This was the largest and altogether the most perfect theatre which I ever saw during my various journeys. At a right angle, and close to this structure, there is a smaller theatre of about 100 feet in diameter, which is now in a ruinous state. It appears to have had three entrances, and the remains of five rows of seats may still be traced. A line of columns marks the limits of a square enclosure, having the river in the centre of the space, which probably was appropriated to horse and gymnastic exercises.

Grand theatre at Amman.

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The former city appears to have been built close to the northern hills, on the crest of which are the massive walls of the Castle of Amman, and within these are portions of a Corinthian temple, and several cisterns cut in the rock. The remains of houses fill up the rest of the space, which has the form of a parallelogram. A little way to the eastward, the walls of the ancient city were conspicuous; but before there was time even to commence our examination in this direction, Hattib [illegible]ured, and urged our immediate departure, in order [illegible] 'an *expected attack*.' In any case, our [illegible]nation of the ruins was all but completed, and [illegible]ore acceded to his request; and taking a [illegible] direction, as before, we passed between the [illegible]ge of Um-el-Khalid, which occupied the summit [illegible] low hill on our right, and the tumulus of Djaled on our left. The Arabs entertain a feeling of deep veneration for this tumulus, which contains (they say) the bones of Hamed, the builder both of Amman and of Jerash.

Castle of Amman.

An undulating pasture-country brought us to a cultivated spot, which was to be our camping-place for the night. This was the Arab encampment of Gait-el-Sook, which extended for some distance along a valley, receding in a northerly direction. Robinson and I were about the last of our party to arrive, and we found the long lances of our Arabs placed at the entrance of the tents, and their horses already picketed outside, while it was some time before we could find any accommodation. A general supper had been prepared for the whole party, however, in which we had been included, and our allotted portion of goat's flesh

Gait-el-Sook encampment.

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and soup were most acceptable after our long day's march.

We were hurried to horse before daylight the next morning, without being able to procure even a little water. We passed flocks of sheep, watched by a solitary Arab, here and there, and stopped to dine at the Bedouin village of Suleiman.

Suleiman, Bedouin village.

During this halt we visited the remains of Grezia, which occupy three adjoining hills, but the ruins are of but little interest. They consist chiefly of unimportant arched buildings; but there is a fine cistern of cut stone, 130 feet long by 90 wide, and 20 feet deep, and the remains of an aqueduct, which show that some place of importance must have existed in this vicinity at one time.

Resuming our journey in the afternoon, we crossed the great caravan route leading to Mecca, and entered Wadi Hamman; taking, as usual, the precaution of sending some well-mounted men in advance and placing others at a little distance on each flank. Having proceeded thus cautiously for some time after dark, the proximity of numerous tents and the barking of dogs led us to expect our usual halt for the night. To our great surprise, however, we found that we had been deceived, and that Hattib had conducted us to the encampment of his own tribe, of which his tent formed the centre. Here he was warmly greeted by the inmates of his harēm, and, turning to his guests—his mind, as it soon appeared, full of the most sinister designs—he paid us the Spanish compliment of assuring us that all was at our disposal.

Wadi Hamman.

Hattib's tent.

Reception by Hattib.

Crowds of visitors filled his spacious tent without

intermission, and the various household occupations and hospitality of the evening meal restored in some degree a feeling of confidence in our host. Towards bedtime, supper was brought from the harēm, which was only separated from the exterior or men's apartment by a thin curtain. The viands consisted of bits of meat rolled up inside thin cakes of bread, and a dish of prepared raisins, which was followed by a huge pilau. Stories were told of the doings of the Aniza Arabs during previous journeys and a cup of coffee ended the evening's entertainment.

The prosecution of our journey was naturally uppermost in our thoughts, but whenever we approached the subject it was met by excuses, which soon told us that Hattib was determined to exact more than the stipulated sum—which, as is usual in all Arab transactions, had been paid in full in advance—before carrying out his agreement. No sooner did I understand this, than I made up my mind to leave the encampment, and started by myself, purposing to take a direct line over the mountains to the Jordan. In less than an hour I heard shouts of 'Tal—tal' ('Come back') to which I turned a deaf ear, and continued to proceed, until Yahia, one of Hattib's men, and a companion with him, appeared in front of me, to bar farther progress. I produced my double-barrelled pistol, and they gave way. I went on, when Hattib himself came up, mounted on his fleet mare; and seeing at once that I was prepared to resist him, the Arab chief cantered round me at the distance of about six paces, his carbine placed against his shoulder, resting on his bridle-arm, and his dark rolling eye appearing

Leave Hattib's camp.

Overtaken by two Arabs and Hattib.

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above the barrel of the piece, showing unmistakably that it was aimed at my person; and thus it was kept, whilst, at a hand-gallop, Hattib continued to circle round me, using menacing expressions, which left little doubt as to what would be the result if I persisted a moment longer in my purpose. It therefore flashed across my mind, that submission was the only chance of saving my life; and, by way of proving that resistance was at an end, I instantly sat down, placing my pistol on one side as I did so. On perceiving that there was no longer anything to apprehend, the two Arabs came up, and proceeded to take their revenge by beating me in a cowardly manner. Hattib also dismounted, and approached with his drawn sabre, apparently determined to cut me down.

Surrender to Hattib.

My submission, however, diverted him from his purpose, although he continued his angry menaces until we reached his tent, which I at first refused to enter, and, turning my back upon those who had so outrageously violated the sacred laws of hospitality, I vented my feelings in the epithet 'Harrami,' meaning 'Robbers.' Being, however, quite in their power, they forced me to enter the tent, where I took my seat beside my travelling companion in no enviable frame of mind. The tent was crowded with listeners and talkers discussing the events of the day, which led—in some way which my imperfect knowledge of Arabic did not permit me to comprehend—to a serious fracas. I could understand that my attempted escape was the cause of the excitement, and of the punishment inflicted by Hattib on those of his followers who seemed to be taking my part; but when this had subsided, he reverted to

Fracas among the Arabs.

his engagement, and, as a proof of his sincerity, actually quitted his camp the next morning, with a numerous escort, who were however, we noticed, without their usual travelling accompaniments of rugs, while much whispering and mysterious signs made us fear that all was not right. We travelled over an undulating country, admirably fitted for sheep-pasture, and passed the ruins of the town of Ain-es-Zebaid, which lie in a valley on the great Hajji route; a little farther on we reached the Castle of Jael, occupying an eminence, and reminding me forcibly, by its structure, of the Vale Castle in Guernsey. Near this place we passed a large herd of camels browsing over these undulating downs, guarded by two mounted Arabs. Four hours' riding brought us within sight of Om-el-Rassas (Mother of Lead), about which place we had heard a great deal. A distant view of its lofty walls and towers promised to realise our expectations, but a nearer inspection disappointed us; for we found its buildings and reservoirs, although extensive, quite uninteresting in themselves. The neighbouring lead-mine might, however, again become of importance.

Om-el-Rassas.

I had scarcely completed my examination of the ruins of Om-el-Rassas, when Robinson brought me the unexpected intelligence, that Hattib and his tribe had departed for Medina, taking all the cash they could find in our travelling-bags. They had not, however, left us entirely to our own resources. Two Arabs had remained behind, ostensibly for the purpose of conducting us to the ruins which were still to be visited; but my misgivings were seriously increased when I perceived that the individual belonging to Hattib's

Yahia as conductor.

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tribe, on whom we were to depend, was no other than Yahia, who had already beaten me so shamefully. Still, as we were their equals in number, I consoled myself with the reflection that I could either leave them at any time, or—if I fancied it desirable to remain rather than compromise Mr. Robinson's safety—we could either discharge the fellows, or force them to obey us.

Tents of Akfou.

We therefore continued our route, halting in the afternoon at the tents of Akfou, where—no doubt in accordance with a previous arrangement of Yahia—we were joined by another of Hattib's people; and they informed us that our liberation was to depend on their receiving a considerable ransom from Damascus, for which my head was to be answerable, and which (I *now learnt for the first time*) had been promised by my companion. I had been no party to this compromise, and therefore considered myself at liberty to

Intended escape.

escape, which I proposed attempting, by creeping out from beneath the tent after nightfall, and making my way round the Dead Sea to Jerusalem. Mr. Robinson however thought, naturally enough, that such a step would compromise his safety, which decided me to remain, and confine myself to sending our Greek boy to Szalt, or (failing assistance from thence) to Damascus, to procure funds and aid of some kind. It was under these uncomfortable circumstances that we quitted the hospitable tents of Akfou the next morning.

We passed in succession the ruins of El-Hurry, Ain-Madaba with its pyramids, those of Grezia also, and halted about noon at the Arab tents of Delola. Here we got some bread after a short rest, and rode for four hours over a fine grassy plain to Madaba, where

we found the ruins of a temple, the site of an extensive town, and a cistern 130 yards long by 100 wide, and fully 18 feet deep, surrounded by a massive stone wall. Soon after leaving Madaba, our guards pulled up on the Plain of Hesban; and here they got Mr. Robinson to enter into a solemn agreement with them, in the name of Allah and his Prophet, to the effect that a certain sum of money was to be paid to them as we approached Damascus. I was no party to this agreement; but Yahia evidently now felt secure of our ransom, and professed himself ready to proceed with our journey.

Madaba.

Ransom promised.

We passed the temple and shortly afterwards the castle of Hesban, and sought hospitality for the night at the tents of the people of this place, which were very numerous, covering a large square of ground. The evening had almost closed in when we arrived, but there was still sufficient light to enable us to enjoy the scenery, which was very attractive; indeed, we were greatly delighted with its beauty the following morning, when, after a cup of coffee, we left the camp at sunrise. We travelled until noon through a succession of valleys, richly wooded with oaks and other fine timber, to Insūry, where the Arab tents, like those at Hesban, were pitched in a square, and in a sheltered recess on the western side of this rich and fertile valley. Here we had to go through another curious scene with our guards, for Yahia, backed by the people of Insūry, made such exorbitant demands as must have put us to serious inconvenience. But their exactions were all agreed to by my companion, and with good reason, for he had been made to understand, unmistakably,

Hesban.

Insūry.

Further exactions.

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that my head was at stake in case of any hesitation on his part.

From Insūry we took a northerly direction, passing through a succession of richly-wooded hills, below which we could discern the Dead Sea and trace the River Jordan, with a mountain range behind it, characterised by bare and rocky slopes. During the early part of the day our road lay through hills clothed with oak, fir, &c., while the oleander, balsam, and other shrubs were clustered in the sheltered ravines.

Early in the afternoon we reached the village of Ragalameen, where Yahia announced that we were to remain until nightfall, that we might pass by some dreaded Arabs in the dark. Coffee was brought, and dinner followed, in the shape of a dish called *fatate*, which consists of boiled meat swimming in oil. After our repast we visited the remains of the palace and temple of the ruined town of Meidan Abū, and saw some rude troglodyte dwellings on the side of the mountain to the westward. It was near daybreak before Yahia was ready to move on, when we ascended a hill following our guide, and entered a valley running to the northward. Some questions were interchanged here with some people in the wood, two of whom, armed with long guns, were seated on the side of the hill overhanging our path. A little farther on five more Arabs appeared, then two more at another spot; and Yahia did not fail to make the most of the perils we had escaped, and (no doubt as a reward for his own good management) he and his companions halted to examine our travelling-bags once more. Neither Robinson nor I had the least idea that anything had escaped their rapa-

city at Om-el-Rassas; but 600 piastres, the wages we had paid to our boy Giblain,* were most unexpectedly found on his person, of which, in addition to Mr. Robinson's pocket telescope, the two Arabs took possession; and we then moved on with unabated interest, notwithstanding our uncomfortable situation, through more lovely scenery than can be imagined. Around us the bright blossom of the apricot trees, now in full bloom, came out in beautiful contrast with the apple of Sodom, and the dark foliage of the evergreen oak; the various feeders of the Jordan sparkled and were partially hidden by the bright glossy leaves of the oleander; whilst through occasional openings in the foliage we again had glimpses of the Dead Sea and River Jordan, shut in to the westward by a rugged range of lofty mountains. Beyond we caught a distant view of Szalt—a cheering sight to us under present circumstances.

It was in the midst of this exquisite scenery that, to our surprise, our two Arabs sat down to count their booty; and as the money was in small pieces of mixed metal, this became a very tedious operation. They were seated on the ground quite absorbed in their task, their sabres laid on one side; and I pointed out to my companion, that if we each seized one of the fellows by the shoulders, and pulled them back at the same time, they would be completely in our power, especially as we could avail ourselves of their arms. But Mr. Robinson felt doubtful of success, and, to my great mortification, the opportunity was lost. The small Turkish pieces were counted at length, and replaced in the purses of

Project to master the two Arabs,

* This boy had remained, being afraid to undertake the proposed journey to Damascus for help.

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and proceed towards Szalt.

their temporary possessors; and we resumed our onward route, which soon brought us within sight of Szalt. Yahia at once rode forward, to give, as we afterwards ascertained, his own version of our affairs. Left to himself, the remaining Arab became so intolerably insolent that my patience gave way, and seizing a stick, I made use of it so effectually that the fellow was about to make his escape, when I took Mr. Robinson's gun—which, by Yahia's desire, had been loaded the previous morning in anticipation of an attack—and called out, in the most threatening tone 'Tal—tal' ('Come back'), which, thanks to the long fowling-piece, he did at a snail's pace, and we took him as a prisoner into Szalt. Here we found Yahia in the public room, holding forth to the people, with whom he seemed to be on the best of terms.

The Arab made prisoner.

Reception at Szalt.

Coffee being brought, as usual, our case was formally but very briefly stated in the Medhan's court. Yahia, nothing daunted, then made his statement, which was to the effect that he had been chosen for the purpose of taking us safely to Damascus; and that he had not robbed us, but only taken our money *in order to secure it* for us, although (as he seemed to imply) I had no claim to such kind consideration, having presented my pistol at him at one time, purposing to shoot him. His dogged tone and manner while saying this were altogether different from the subdued account given by his companion, and the result of the hearing was that our money was to be restored, and that both Arabs were to be detained prisoners. Yahia expressed much indignation at this result, which, as we afterwards found, he had but little reason to expect, and he said, when restoring our money, that he would be revenged. The

Our case dealt with.

affair thus adjudicated was followed by a substantial repast, to which, to our great surprise, Yahia (although still a prisoner) was invited. But this was going rather too far, and we objected most decidedly to sit down with him, and, after some discussion and altercation, we carried our point, and were served apart.

Repast at Szalt.

We now hoped to make such arrangements as would enable us to accomplish our visit to Jerash, to which place Hattib was to have taken us. After many difficulties we succeeded in obtaining a strong guard, and left Szalt for that purpose. Yahia set out at the same time, having persuaded the authorities to give him a memorandum for his chief Hattib, to the effect that he had conducted us thus far in safety. It was thus made clear to us, that although the inhabitants of Szalt had felt obliged to afford us some protection, they had no intention of offending the powerful Hattib; and as his surly lieutenant was now at liberty, there was good reason to fear some hostile proceedings on his part, if delay on our side should give him sufficient time to mature his plans. We were not, therefore, free from evil forebodings.

Yahia leaves Szalt.

Szalt is, of itself, far from being without interest. From the hill above the town there is a commanding view of the mountains, particularly of those westward towards the Jordan, which are very remarkable in outline, and extremely interesting. Mount Pisgah (or Nebo) and Jebel Mousa stand out conspicuously, and form part of this extensive view.

Description of Szalt.

On quitting Szalt we proceeded, in a north-westerly direction, through a mountainous and very beautiful country, its subordinate hills being clothed to their summits with valonia, oaks, arbutus, myrtle, and many

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Tomb of Osha.

other graceful shrubs. We passed a little to the right of Nebi Osha or Hausa (the 'Tomb of Osha'), and visited the ruins of Ammon, and so on by Jebel Djelaab (probably Ramoth in Gilead).* We remained for the night in the stone-built village of Jezarēn.

During the evening we unexpectedly received a hint to be cautious. Two strangers arrived from the neighbourhood of Jerash, and were, like ourselves, guests in the public room. Among the tales which, as usual, went round after coffee, our attention was excited by hearing that some Arabs were waiting at Jerash, to attack some travellers who were on their way to see the ruins. This was far from pleasant, but

Reach Jerash.

our strong escort of sixteen armed men giving us confidence, we went on, and reached Jerash early the following afternoon, and at once set to work to examine these most interesting remains.

We kept moving about from place to place, and I had nearly finished my examination, especially of the eastern side of the ruins, and was about to return to the escort, when I perceived the point of a lance, with its unmistakable fringe of black ostrich-feathers, peeping about the buildings, followed by a second, and then by a third. Believing that there was little cause for apprehension, with such ample protection at hand, and being quite unencumbered, I hastened through the débris, which made the ground so broken and difficult that no horse could have overtaken me, and so found my companion and the escort. Our party at once came forward, and made known to the hostile Arabs that we were under

The Beni-Szacher.

their protection. A long parley ensued, which ended

* Deut. iv. 43.

by the withdrawal of the Beni-Szacher section of the Aniza to some little distance, and our people, having thus shown a bold front, urged us to hasten our departure as much as possible. Under different circumstances this would have been a grievous disappointment. But, fortunately, we had already examined, with considerable care, almost every part of the ruins of Jerash (once Gerasa).

Ruins of Jerash.

A detailed description of these ruins would demand more space than I can devote to it, but their site is too interesting to be quite passed over. They occupy an elevated plain on the sides of Kerouan, or Seil-Jerash, and have a circumference of more than four miles. The most interesting portions of these remains extend from north to south, parallel to the right bank of the Kerouan, or Seil-Jerash. They consist of a bridge, two great temples, one of which almost rivals that of the Sun at Palmyra; a spacious semicircular colonnade, with the remains of two rows of columns, evidently once a street, with another crossing it at right-angles; an aqueduct, a naumakia,* a palace, and two theatres. The higher parts of the ground on each side are occupied by the remains of private dwellings, and beyond these, towards the north-west, there is an extensive necropolis, with numerous finely-executed sarcophagi; indeed, the *coup d'œil* of Jerash, as seen from the high ground on its eastern side, is one of the most striking that can be imagined.

View of Jerash.

Having gratified our anxious followers by turning our backs on this ancient city, and the Beni-Szachers at the same time, we crossed the hills to the clay-built

* Place for aquatic sports.

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Village of Souf.

village of Souf. Here we were well received at first, but all was changed when the people discovered that we were almost without the means of satisfying their expectations. It was with the utmost difficulty that we could obtain a guard of four men, with which we quitted this inhospitable village in the morning. Our previous escort left for Szalt at the same time. Taking the ruins and excavations of Fokkera as we proceeded, four hours through parklike scenery brought us to

Tibnē.

Tibnē, a town of some 500 houses, where, instead of the sordid exactions we had lately experienced, a friendly reception awaited us; and, after a very acceptable meal, we had the pleasure of seeing Lake Tiberias before us, still as a wide-spread mirror surrounded by hills.

A collector of taxes was making his periodical visit to Tiberias, and from him we expected to be able to obtain a supply of money, as well as to receive hospitality; but we were mistaken, and had of necessity to continue our journey with an almost empty purse.

Forra.

A ride through picturesque hills brought us the next evening to Forra, or Fokkera, which is a somewhat singular place, the dwellings being partly in caves, and the rest consisting of tents. We were received rather unwillingly by the Sheikh, who occupied one of the former. It was spacious, and divided into two apartments by a row of huge earthen jars containing flour and grain. The inner part was allotted to the females, and the horses occupied a portion of the outer division.

Story of Hattib.

Stories, as usual, whiled away the time in the evening, one of which concerned ourselves. It was the story of Hattib, which, to our surprise, we found had preceded

us. As I write, the scene in the cave rises up before me again. The figure of one old woman especially stands out, as, with her hands on her sides, and literally *splitting* with laughter, she enjoyed the joke, ejaculating 'Hattib—Hattib!' till she could scarcely stand. They little imagined that the actors in this tale were then listening to all the merriment their misfortunes afforded. Other tales and meagre viands, and some arrangements for the following day, closed our evening in the cave.

The difficulties which occur, even under ordinary circumstances, in desert travelling, became almost insurmountable next morning; but by leaving a cloak in deposit they were at length overcome, and a guide being allotted to us, we set out to visit the neighbouring ruins of Omkēs Gadara. The scenery was rich and varied. We rode through a country covered with sycamores, acacias, and evergreen oaks—having on one side the village of Daboo, whose inhabitants have a very bad name. We now began to ascend the adjoining mountain, and arrived shortly afterwards at the cemeteries of Omkēs. Here we found many sepulchres, and scattered remains of sarcophagi—both of exquisite workmanship. The former, in addition to their striking elevation, had marble doors, which moved with facility on a pivot of the same material, and were ornamented on the face with figures in relief. In some instances the doors were still perfect, and showed knockers also in relief. Some of the sarcophagi, which time has laid bare, seemed as fresh as if they had recently come out of the sculptor's hands. On one of these were three figures, finished with

Daboo village.

Omkēs ruins.

CHAP. III.

exquisite taste, and each holding part of a rich wreath of flowers, and apparently dancing. In addition to these monuments, and the remains of dwellings, ancient Gadara has two theatres, two temples, a colonnade, portions of an aqueduct, and other ruins on the face of the hill.

On returning to Forra, the difficulty of satisfying a grasping host was at length overcome with the remaining contents of our purse, and by the sacrifice of the cloak, which was *taken* rather than *given* by way of remuneration; and in the afternoon our joint eventful journey was brought to an end, for here Mr. Robinson and I parted. He had found a safe opportunity of reaching Damascus, where he had funds, whilst I looked forward to obtaining some before long elsewhere. This journey, so full of exciting interest, had given rise to conflicting feelings in my mind towards my companion. I had been deeply disappointed when I did not find myself seconded in my impulse to seize the two Arabs while in the act of counting our money. But, as I descended the mountain alone, I began to view this, and other occurrences in which we had been mutually engaged, in a different light; and considering that my own attempts to escape, or to visit the robbers with the punishment they deserved, might, and probably would, have cost my life, it was with a grateful recognition of Mr. Robinson's superior prudence that I proceeded on my way.

Part from Mr. Robinson.

With a part of Lake Tiberias and the mountains near Jerusalem in view, a somewhat steep descent, through acacias and oaks, brought me to the banks of the Hieromax, thickly clothed with oleanders; a little

farther on, that portion of the Jordan came in sight which is so mysteriously lost in the Dead Sea. I crossed this stream—the Havilah of the Jews, and perhaps the most remarkable river in the world; and two hours brought me to the warm springs of Tiberias, which are about a quarter of an hour's distance from the town.

Here I found an American Israelite, a Mr. Samson, who, on hearing that I was without money, kindly supplied my immediate wants. From Tiberias I visited every place of interest in its neighbourhood, and then made my way, by Mounts Tabor and Carmel, to Acre. Here my funds were renewed, and I continued my journey without further adventure, by Saphet, the Upper Jordan, and Banias, to Damascus, where, as will be seen in the succeeding chapter, a change of plans became unavoidable.

CHAPTER IV.

JOURNEY THROUGH THE ARABIAN DESERT FROM DAMASCUS TO EL-KAIM, AND PREPARATION OF THE RAFT TO DESCEND THE RIVER EUPHRATES FROM ANNA.

CHAP. IV.

Dec. 10, 1830.

Preparing for the desert journey.

OWING to the kindness of M. Baudin, a trustworthy interpreter was engaged, and a tent and other necessaries provided; and I was just on the point of leaving Damascus with my dragoman (Halil, a renegade Christian) and his slave-boy, a child eight years old, when intelligence reached me which caused a change of plan on my part. An old Arab, who had just arrived with a caravan, brought word that a wounded English traveller was waiting at Tadmor for an opportunity of reaching Damascus. M. Baudin at once despatched a trusty messenger, with letters both in French and English, to the supposed Frank, assuring him that the bearer would conduct him safely, and I proposed so to change my line of route as to enable me to find and succour this wounded traveller. Consequently, I joined our little camp outside the gate leading to Palmyra, where I found several individuals going with merchandise to Bagdad and Basrah; one of whom was provided with the comparative luxury of a horse, notwithstanding the difficulty of carrying provender.

Join the caravan.

My tent was soon added to those already pitched, and there I passed my first night, but not in sleep; for my

mind was full of absorbing thoughts of the coming desert journey, and of the arrangements connected with the descent of the River Euphrates.

Dec. 11, 1830. First day of the desert journey.

Long before daybreak our camp was the scene of bustling activity; the tents were struck, and packed; the camels made to lie down to receive their burdens, to which their moanings (as one package was added to another) showed strong objections on the part of these patient creatures. Their loads secured, they were made to rise in succession to commence the day's journey. Our leader and guide was a middle-aged Arab, named Abdallah, who had a younger man as assistant, also in some authority. These led the way, riding side by side on the 'delūl,' or light camel; and they were followed by a donkey, whose pace regulated that of the camels behind him, which are allowed to spread out as they advance, for the sake of feeding on the scanty grass, camel-thorn, and other desert shrubs.

Our first encampment.

We had not yet fairly entered the desert, for we passed two villages during the day, and eight hours of constant motion brought us to our first encampment. Here the camels were made to lie down, to be relieved of their loads, which were placed in convenient order for reloading in the morning, and the animals turned out. After being allowed to browse for two or three hours, a ball of cotton-seeds was forced down the throat of each, and they were then all made to lie down in a circle, round the tents and merchandise. Their animals thus cared for, the Arabs no longer delayed their own supper, always the principal meal of the day with them.

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Food and cookery of the Arabs.

This usually consists, as it did in this case, of thin cakes of bread, and a pilau of 'bourgul,' or boiled wheat, mixed with some butter or oil. A few dates and an ample supply of water completed the meal, and sleep was indulged in almost immediately afterwards.

Our tents were pitched at some little distance on one side of our intended route, as being less likely to be seen; and as we were comparatively safe from all danger while still so near Damascus, fires were lighted, which is not done when there is any cause for uneasiness. It was decided by the Arabs that I was to play the part of a deaf-and-dumb man, in case of our meeting the Aniza or any other hostile tribe, and this *rôle* was strongly impressed upon me. Early the next morning I managed to snatch a hasty breakfast, while the Arabs were striking and packing my tent. We next proceeded in an ESE. direction, having some high hills and distant mountains in sight to the westward.

Directed to feign being dumb.

For the first hour we passed through fields, but after that found ourselves entering the desert, where some wild-boars crossed our path during the day. At its close, we halted near the small clay-built town of Jeriateen. We were told to husband our supply of water (carried of course in large skins), as five days must elapse before any more could be obtained. Next day, the usual bustling confusion of loading over, we proceeded along a dead level, with a range of elevated hills on each side. Our camels, as they advanced, turned their long necks from side to side, to pick up either the small thorny shrub called 'natour,' or the soap-plant, the 'odoor;' they also occasionally found the 'roté' or 'rotoga,' which is eaten by them with avidity.

Desert plants.

Soon after four o'clock we quitted this monotonous plain, and, going a little to the right, entered a valley running towards the ESE. Here we were less exposed than on the open caravan line, and we pitched our tents, turned the camels out to feed, and prepared supper—the Arabs lighting fires, and baking their thin cakes of bread, as usual.

End of third day's march, Dec. 14.

Notwithstanding a thick fog, we resumed our journey early the next morning, and found the ground quite damp, owing to a heavy dew. Re-entering the valley plain, which we had quitted on the previous afternoon, we proceeded nearly due east, over a flat surface some five miles broad, bounded by a range of mountains on either hand. We were told that five days must *still* elapse before any supply of water could be obtained. The scenery was of the same monotonous character as that of the previous day, until late in the afternoon, when we came in sight of a remarkable double-topped mountain which rose up in front of us, apparently barring our further progress. It was, however, more distant than could have been supposed, and it was sunset before we reached it, when, turning to the south-east, we entered a narrow valley at its base, in which our little camp was quite concealed from observation from the adjoining plain.

During the day, I had endeavoured to beguile the time by walking, and often strayed to some little distance from our party, which gave rise on one occasion to a trick on the part of the Arabs, who are particularly fond of jokes, which was carried out most successfully against myself. Two Arabs almost naked, and apparently much excited, rushed wildly towards me from

Arabs feign to be enemies.

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behind a hill, brandishing a stick, and yelling most vociferously. Taken completely by surprise, and being quite unarmed, I scoured across the hill, closely followed by my supposed enemies; and on approaching the caravan, two of our people darted forward with drawn swords, as if to give me protection, and intercept my pursuers; they still endeavoured to get at me by making a round, but being foiled, their trick and disguise came to an end, though the joke continued to be heartily enjoyed by the whole party for some time.

End of fourth day's journey.

Our course the following day was still NE., and subsequently ESE.; but the contour of the mountain-chains afforded more variety of scenery than on the previous days, while we also found a greater abundance of small desert shrubs, among which the 'roté-de-gemel,' with its soft green thorn, preponderated.

Our supply of water was by this time almost exhausted, so that the mere humid appearance of the ground at one spot caused unusual excitement. Some of our Arabs rushed forward, and discovered a small quantity of water in the crannies of the rocks; a little farther on we came upon quite a small pool, which, though neither pure nor good, was hailed with delight. The Arabs rushed into the water, such as it was, and commenced drinking, filling their skins, and giving it to their animals without a moment's delay, and with all the bustling scramble incidental to securing a supply for five days more. This over, we journeyed on until dark, and then encamped for the night.

A sight of the hills behind Palmyra having given

me the hope of reaching that place next day, I invited our leader (Abdallah) to sup with me, in order to make all arrangements for being conducted thither in the morning. But a dense fog delayed us until eleven o'clock, when we moved on over a slightly undulating plain tolerably well covered with long grass, in addition to the usual desert shrubs.

Mountains near Palmyra.

The mountains were lowest towards the NE., and advancing in that direction we lost our way, and had to make zigzag traverses to find it again; during which we came upon some puddles of rain-water, on which our men and animals rushed with such avidity, that every drop was drained from the moist clay. Our skins thus partially refilled, we continued our journey, and were ready to resume our previous line of route in the morning; whilst I was to make a round by Tadmor, which would have occupied about ten hours, escorted by Abdallah's nephew. Delūls, or swift camels, were provided for both of us, when another delay arose: the merchant's horse had strayed, and the morning was spent by our whole party, both mounted and on foot, in searching for him. The animal was at length recovered, and I looked forward to a start in the afternoon; but I was again disappointed, and had to move on with the whole caravan over a complete desert of indurated sand and gravel, mixed with hard black stones.

Arrangements to reach Palmyra.

Appearance of the desert.

Here and there, rushes and scanty shrubs showed where water had been, although, to our disappointment, the ground was now dry. A general consultation ensued, the great object of which was to decide where

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water would most probably be met with: everyone gave a different opinion, and, in the general anxiety on this subject, Tadmor fell to the ground for the present. An hour's travelling over a surface of hard baked sand and black stones brought us to the bed of a stream, now perfectly dry; and as danger from hostile Arabs was apprehended, we had to pass the night without lights or fires.

Dec. 18, eighth day. View near Palmyra.

The hills behind Palmyra were distinctly visible at sunrise next morning, and something like a shadow of the ruins was discernible. Abdallah continued to hold out hopes of conducting me to them; but as we reached the expected watering-place early in the day, our caravan had to halt, for the all-important purpose of securing a supply of the precious fluid, and we encamped in a circle round one of the ancient wells.

Well in the desert.

It was cased with stone, and being very deep, the operation of drawing water was tedious; for we had but *one* leather bucket, which had to be let down and drawn up, until all the water-skins were filled; and when this operation was completed, the camels had to be supplied not only with a copious draught, but also with a sufficient reserve to enable them to continue their journey. The second or reserve stomach with which Nature has provided this Ship of the Desert, contains, when filled, a sufficient supply of water for at least six days; in some instances it has been known to last for even nine days.

Tenth day, Dec. 20.

This busy operation of watering left us but little time before evening closed in; but we resumed our journey early on the following morning, and moved forward in the usual order, our camels feeding leisurely as they

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Alarm, and defensive preparations.

passed along. Early in the day we came upon some fresh dung, the sight of which caused an order to halt; and an Arab council of war was held, the result of which was the despatch of three of the party in different directions, armed with matchlocks. Nothing whatever could be seen, and we resumed our journey, with the belief that the supposed enemy had left the place. About ten o'clock we halted in a secluded bend of the hills, and avoiding fires, lest the dreaded Aniza should find us out, I was again reminded that, in case of their appearance, I was to personate one deaf and dumb.

A cold supper was, however, our only privation, and we started as usual in the morning, keeping parallel to the mountain range on the western side of the valley. At this point I again attempted to reach Tadmor, or at least to send a messenger thither, but all my efforts were fruitless. Abdallah, probably to get rid of my importunities, greatly increased his demands: no messenger could be procured, and I began to suspect that our leader's real objection to earn a good reward arose from his excessive apprehension of danger. It was not, however, until the outline of the mountain range showed that we had gone quite beyond Palmyra, that I gave up the hope of accomplishing my visit; then, indeed, I had to look forward to communication with the wounded traveller from Hit or Anna.*

The progress of our caravan was suddenly inter-

* Later, I ascertained that this account of a wounded Frank at Palmyra was a mistake, and that Messrs. Taylor, Bowater, and Aspinall had been murdered on their way to Mosŭl.

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rupted, during the afternoon, by the cry of 'Moie—moie!' Every eye was turned eagerly towards the expected water, and all hurried onwards to secure some part of the supply, which, to our great disappointment, turned out to be nothing more than some muddy pools between the crevices of the rocks.

The Arabs follow the sun as it rises.

When resuming our journey early the next morning, I observed that our leading Arabs took their direction at first from the sun's rising, and afterwards followed the sun's path, continuing to do so for some time—our course thus making quite a curve. Later the beaten path became our guide, and was followed until we reached the Derb Sultán, or Imperial road, which led from Palmyra to the summer palace of

Zenobia's summer palace.

Zenobia, on the banks of the Euphrates. Here the line of country became less desert: to the west we had the distant and lofty chain of Palmyra, and to the east an apparently boundless plain, broken only by three rather remarkable conical hills, which stood out on the distant eastern horizon. Our Arabs, no longer

Arab pranks.

anticipating danger, were in high spirits, and full of good-humoured tricks and fun with each other—firing a pistol, to frighten some pretended fugitive, being one of their favourite devices. In a desert journey the veriest trifles acquire some importance, and it was not, therefore, without interest that we at one time watched some gulls, apparently winging their flight towards the Mediterranean, and at others saw some crows, numerous larks, and once a solitary gazelle.

Seven Hills appear midway.

Early in the afternoon, the beaten path brought us to the Seven Hills, which are chiefly remarkable as being midway to Bagdad, and consequently told us that

A. A. Staunton del.t

Fairland lith.

BIVOUACK OF A CARAVAN OUTSIDE THE VILLAGE OF BOWAR SHOGAN.

more than half our journey across Arabia was already completed. Having attended to our supply of water, we continued our journey. The mountains towards the west were still tolerably distinct, but the horizon alone bounded our view towards the east. Litour and other healthy shrubs were plentiful, mixed with a fair proportion of grass, which was saturated by a recent fall of rain. This appearance of moisture was most cheering to the Arabs, and their spirits led them to indulge in all kinds of pranks, in some of which the merchant took a part, until our halt put a stop to their hilarity.

Desert shrubs.

But here a fresh incident arose, to relieve the monotony of the journey. One of the camels being considered hopelessly ill, the Arabs—in great delight at the prospect of a feast—proceeded to kill and cut him up for the evening meal. Their preparations for the night are invariably very simple. They place a double row of bales of merchandise, in the form of a crescent, on the side of their encampment towards the wind, and squatting round a bright fire of brushwood and camel's-dung, prepare their evening meal of thin cakes of bread (freshly baked in the ashes), dates, and camel's-milk, concluding with a small cup of coffee. This was their daily fare; but on the present occasion, there was the very acceptable addition of the freshly-killed broiled flesh of the sick camel.

A sick camel killed and eaten.

Next day we crossed a track so perfectly level that we might for some time have fancied ourselves at sea; in the west alone distant highlands could be faintly discerned. As we advanced, we sighted some chalk hills, and learnt, to our great satisfaction, that they were on the left bank of the Euphrates. We crossed

Dec. 24, fourteenth day.

Chalk hills on the Euphrates.

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the rocky bed of a river, which, though nearly dry, afforded us a partial supply of water.

Our people had latterly ceased to think of danger, and were therefore but ill-prepared for hostilities, when the merchant came riding hastily back to Abdallah, to tell him that enemies were to be apprehended. Every individual at once seized his matchlock, and prepared to meet the foe. Following this example, I alighted from my camel gun-in-hand, and joined the party, when I learnt that all this commotion had been caused by the appearance of *two Arabs*. No more were seen, and things gradually subsided into their usual course, and we encamped at night at a little distance off the direct line, and took the precaution of doing without light or fire.

Expected attack.

Fires dispensed with at night.

We were on the move before sunrise the next morning, and as a matter of prudence, as well as on account of Abdallah's great anxiety, we took a more westerly direction, so as to come upon the river at a point higher up than had been originally intended. Towards midday, we passed along a chain of hills, and advancing, with the great river occasionally in sight, we eventually encamped about an hour's journey short of its banks. We had all but attained the principal object of our journey, and I urged an immediate advance; but was met, as usual, by difficulties and allegations of danger from Abdallah, and my only resource was patience under this disappointment, and a night spent in watching for the daylight. It came at last, and with it our caravan was early on the move. For a time we met low sandy hills, covered with a peculiar shrub resembling fennel; we next crossed

Dec. 25, fifteenth day.

stony beds of streams which were then dry, and reached the right bank of the Euphrates about ten o'clock, passing close to a flat-topped hill surmounted by the tower of El-Kaim. Shortly afterwards we saw the great river itself, spreading out its waters at El-Werdi,* a spot afterwards so memorable to the Expedition.

The Euphrates in sight.

We turned to the east, and followed the caravan route from bend to bend of the river until sunset, when we pitched our tents at the foot of some low hills overhanging its right bank. During supper my attention was attracted by a singularly dull creaking sound, accompanied by that of falling water, mingled with the occasional wild roaring of lions from a different quarter. Anxious to ascertain the cause of these noises, I tried to persuade Abdallah to accompany me to the river, which—after much hesitation, on account of the lions—he consented to do. We walked through copse-wood for about a mile, and then discovered—not a cataract, nor even a waterfall—but some machinery by which water is raised for purposes of irrigation, in the simplest manner possible, the river-water itself being so turned to account as to give the requisite power. This is managed by means of a light and graceful aqueduct, resting on pointed arches, having at its extremity a waterwheel of some 50 feet in diameter, to which the current gives a rotatory motion, as well as the necessary power, by means of a simple contrivance, which raises the water to supply the aqueduct.

Halt near the Euphrates.

Walk to see the water-wheel.

* At this place the two steamers encountered a fearful hurricane, which carried one of them to the bottom; and here also the Emperor Julian lost 1,100 vessels belonging to his great expedition to Babylonia.

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A number of clay cylinders, $11\frac{1}{2}$ inches long by $3\frac{1}{2}$ inches in diameter, and open at one end, are placed round the periphery of the wheel, and are forced round by the current, successively discharging their contents into a conduit, by which the water is conveyed into the interior, thus causing the peculiar noise which had reached us at so great a distance.

Proceed on a camel to Anna.

I gazed for some time with intense pleasure on the broad surface of the noble stream, shining in the bright light of the moon, and then returned to the camp, to make the necessary arrangements for preceding the caravan to Anna. Abdallah accompanied me. We mounted two of his delūls very early the next morning, and leaving Halil to follow with the baggage, we

Dec. 17, 1830.

took the most direct route to Anna. Our line lay almost parallel to the right bank of the Euphrates; and I soon perceived that the waterwheel I have described was but one of a great number which we passed at intervals during this day, and subsequently for a considerable distance, down the river's course. An aqueduct was attached to each, and they only differed from the first one I had visited, by having in some instances two, in others three or even four, waterwheels revolving at the farther extremity of the aqueduct. As far as I could ascertain, these wheels were originally constructed at the time of the Assyrian dominion, and were renewed at a later period, in order to command a good supply of water for agricultural purposes. An undulating country, enlivened by these structures (many of which are still in use), with a background of high hills rising above the left bank, produced altogether a picturesque effect.

About five miles below El-Kaim the river makes a sudden sweep to the north-east, and we thus lost it until, after various curves and even convolutions to the eastward, our line again touched its right bank, after an interval of 11 or 12 miles. We followed its course, still along the right bank, for six miles more, passing islands and several aqueducts—some still in use, but the greater number dilapidated, and without their waterwheels. Here the stream makes a bold curve northward, carrying, as before, a great body of water, till it again touched our route about five miles in advance; where it takes a north-east course, and then, making a sharp bend to the south, it resumes its original direction. The triangle thus made by the descending river covered a distance of about six miles.

Ride along the river-bank.

We passed the second part of this divergency, and followed the stream, which flows eastward, until its broken waters rush over the rocks of Karablah, and pass the town of Rava. This ledge is considered the greatest difficulty for boats throughout the navigation of the Euphrates, from Bir to Basrah. The walled town of Rava stands above the fall; beyond it the river pursues its course, through a long chain of prettily-wooded islands, opposite to the town of Anna. Here I found a fair prospect of procuring the means of descending the river, and I therefore determined to remain at Anna to make my arrangements. Two days later our caravan arrived, and continued its journey towards Bagdad.

Rocks of Karablah.

Anna.

Nearly nineteen days' travelling, through the so-called 'Little Desert,' was necessarily attended with much sameness; but when compared with journeys

The Little Desert,

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through the deserts of Egypt and Nubia, it was decidedly agreeable. The deep sand met with in those parts of Africa is replaced, in Arabian travelling, by a level track, over either a hard pebbly surface, or scanty grass, intermixed with various desert shrubs—such as the 'odoor' (*Salsola Kali*), a low-growing yellow plant, without either thorns or leaves, from which soap is made; the 'litour,' a thorny plant, which only reaches the height of 8 or 10 inches; also the 'roté-de-gemel,' or well-known camel-thorn. These, and a few others, met with more rarely during our journey, constitute the flora of the Little Desert. Brief as this description has been, it will, I trust, give the reader some idea of desert travelling, which must necessarily be of a very monotonous character.

and its plants.

Purpose of descending by water.

Mine was now to be exchanged for a very different mode of locomotion. My object in coming to Anna was to secure the means of floating down and surveying the River Euphrates—the great object which, during all my previous journeyings, I had kept steadily in view.

My position, however, was not free from anxiety. I had still to ascertain, not only whether I could procure the means of descending the river, but whether the Euphrates *were* navigable from Anna to the sea. It was therefore with mingled feelings of uncertainty and of hope that I proceeded to the Sheikh's house, in order to obtain his assistance in the first place; and there, surrounded by a crowd of Arabs, who flocked to see the stranger, I remained until late in the evening, when the Sheikh came home.

Having explained that the state of my health ren-

dered it impossible for me to continue my journey with the caravan, I told him that I was anxious to exchange the rough paces of the camel for the easier conveyance of a boat; and I then produced the Sultan's firman, and requested him to find me the means of proceeding by water to Felujah, whence I could cross to Bagdad.

Intended descent.

The Sheikh, it appeared, had been in that city more than once, and had seen H. B. M.'s Resident—which fact gave weight to the firman, and lessened my difficulties. It was at once arranged that a messenger should be sent to Bagdad with my letter, the chief object of which was to make known to the Resident that I had been unable to communicate with the supposed captives at Palmyra, one of whom was surmised to be Major Taylor's brother. An Arab soon appeared, provided with a short stick with a round knob at one end, as his means of defence, and a bag of dates for sustenance; and being, as is usual with the Arabs, paid for the journey in advance, he took his departure.

Messenger sent to Bagdad.

The Sheikh informed me that my object of proceeding by water might be accomplished either in a country boat, or by means of a raft supported on inflated skins. It struck me that the latter would be much better suited to my purpose than a clumsy unmanageable boat, and the Sheikh at once agreed to have one prepared. The delay, thus unavoidably incurred, gave me time to explore the town of Anna, as well as the many interesting sites in its vicinity, among which that of Anna Tilbus possesses great interest in connection with the Emperor Trajan's descent of the Euphrates. But, instead of

Anna Tilbus.

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bringing me the boat, which I expected, to enable me to descend to that island—a distance of 20 miles—an Arab arrived, provided with four inflated skins, and some willow-twigs to, connect them together; and I found that I was expected to sit across this little raft, with my legs in the water, leaving the current to transport me to the place I wished to visit. This very primitive mode of navigation was not quite in accordance with my ideas, and I thought it as well to postpone my visit to Anna Tilbus, especially as the environs of Anna seemed to offer greater objects of interest than the island.

A primitive raft.

Description of Anna.

The town of Anna itself straggles for a distance of nearly four miles along the right bank of the river, and is almost hidden in groves of date, fig, and pomegranate trees. It contains about 500 clay houses, all built in a line along the bank of the stream, which, in this part of its course, washes two elevated ranges of hills; and in making its way through them, it has formed a string of seven prettily-wooded and cultivated islands, on which were five corn-mills, with their aqueducts, in good repair. Many remains of ancient buildings also exist on these islands: on one of them are the ruins of the Palace of the Persian Emperor Ardeshir, on another those of an extensive castle, on a third the remains of a bridge—which at one time crossed the river—and on a fourth (the largest of the chain) there is a lofty and graceful Persian minareh. On the left bank, and below the modern town of Anna, are the ruins of ancient Anatho, which however, with the exception of part of a castle, and some towers, are scarcely distinguishable. Still, although no longer a royal city, the modern Anna is

Ruins of Anatho.

Lieut.t Fitzjames, del. — G. Hawkins, lith.

Day & Haghe Lith.rs to the Queen.

ANAH.

quite worthy of attention, not only on account of its commanding the principal passage between Aleppo and Bagdad, but also from its picturesque situation and numerous population.

With me, however, the place itself was secondary to the preparation of my raft. This, at times, seemed to be a matter of promise never to be realised, and I began to apprehend some intention of putting an end to my proposed descent; and the particular enquiries, as to my object, my occupation, &c., made by the Shammar Arabs, when they crossed the river, were not calculated to lessen my uneasiness. It was, therefore, with feelings of the keenest satisfaction, that I found the raft put in motion, on January 2, 1831, when I commenced my descending voyage.

The raft prepared and descent commenced.

If the reader should be disposed to take the trouble of referring to a previous volume of this work,* he will find some account of the various kinds of rafts which have been, and still are, in use in Mesopotamia, whilst the annexed plate represents that on which I now embarked.† Its dimensions were as follows:— Its base was a rectangular platform of 14½ feet long by 13½ feet wide, with a sort of well, or inlet, left open at the after-extremity of the structure, which was rendered substantial by successive layers of branches, crossed at right-angles to each other, till they were about 18 inches or 2 feet thick, which gave it sufficient stability. Rough planks were laid above the interlaced branches, to support a platform, on which

Description of the raft.

* Vol. ii. pp. 634–636 of 'Expedition to the Euphrates.'

† *Ibid.* Vol. ii. Plate V.

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a kind of fireplace was fitted up within an enclosure of wet clay (for security from fire); and 40 inflated sheepskins were placed beneath the raft, to give it the requisite buoyancy when floated. And now all was ready for the commencement of my descending voyage.

CHAPTER V.

DESCENT OF THE RIVER EUPHRATES ON A RAFT AND BY BOAT, AND CROSSING THE PERSIAN GULF TO BUSHIRE.

Preparing for the descent.

THE new year and the descending survey were to have commenced together; but it was only on the following day that our preparations were completed, and the demands of the Sheikh satisfied. He had become so much inclined to take care of himself towards the last, that, in addition to the money-payments agreed upon, my white cloak, and some other parts of my attire, had to be made over to him. However, he was pretty well satisfied at last; and some cooking utensils, my tent as an awning, and charcoal, as well as a supply of provisions, having been placed on the raft, this somewhat remarkable voyage was commenced by quitting Anna, with the expectation of being able, in case of urgent necessity, to dispense with additional supplies.

Getgood the pilot.

An Arab, named Getgood, had been selected by the Sheikh, for his fidelity, as well as for his knowledge of the river, to accompany me. Two other Arabs were to guide the raft, by keeping it in midstream, each having for this purpose a rude oar, with a kind of fan or blade at the extremity, made of the wood of the date-tree. These individuals sat on each side of the well, or opening in the after-part of the raft, with their feet in the water, so as to be quite ready to blow out any of the skins from which

CHAP. V.

The survey, and contrivance for sounding.

the air might have escaped. Halil (the dragoman) and his slave-boy completed our party. A pocket-compass gave the bearings of the principal points, and a rough sketch was to be made as we followed the stream. But as any attempt to sound would have been sure to arouse suspicion, which might have proved fatal to success, the very important object of the depth of the river was obtained, approximately, by letting down a 10-feet pole through the well of the raft, which, being forced upwards in case of touching the bottom, or meeting any obstruction, gave me the means of ascertaining the depth of water, without attracting the observation that must have resulted from any attempt to make regular soundings.

Such were the simple arrangements by which I ascertained the ordinary depth, as well as the general capabilities of the river, as the raft descended the stream; and even now, after the lapse of 37 years, the first splash of its date-tree oars is as freshly recollected, as though it had only been yesterday that I was carried along over the unruffled surface of the great river, through the islands of Anna, and the adjoining remains of Anatho. The picturesque scenery of the river did not, however, terminate on leaving the precincts of Anna: watermills and aqueducts were passed, at short intervals, as we floated between its well-wooded banks, and along islands of various dimensions, until the current, now strong and deep, carried us past the still perfect walls of ancient Tilbus. We had scarcely passed between the island on which it stands, and the opposite excavations on the left bank—no doubt ancient troglodyte dwellings—when Halil's acceptable pilau,

Picturesque scenery near Anna.

A. Picken, lith.

Day & Haghe Lith.rs to the Queen.

CAPT. CHESNEY'S RAFT, in 1830.

Descending the Euphrates towards Hadísah.

cooked in our little clay fireplace, made its appearance; and as it was now almost dark, and I did not wish to lose any part of the river, the raft was brought up for the night, as a matter of prudence, at the uninhabited island of Gobain.

Gobain Island.

We were on the move rather before daybreak, and, almost as soon as there was sufficient light, we found ourselves within eight yards of a noble lion, who was pacing leisurely along the edge of the river. My first impulse was to seize my gun, which was rather heavily loaded with pistol-balls; my next was to gaze at the royal animal, as he pursued his way quietly along the bank, and as I did so my destructive inclination passed away; I uncocked my gun, and laid it down.

Jan. 3.

A lion near.

The river was as deep and wide as we had found it on the previous day. It continued to flow to the south-east for a distance of seven miles, having numerous clay-built villages, generally with aqueducts attached to them, on its banks. Beyond this the stream takes a sweep to the south-west, and, after running nearly five miles in this direction, it makes the most remarkable bend (or rather convolution) that occurs throughout its entire course. It literally forms quite a horseshoe, the farther heel or extremity of which terminates opposite the island of Beni-Annan. In distance as the crow flies, this spot is less than two miles from the commencement of this sweep at Hawajji-el-Khawaslik, from whence, according to the Arabs, the call to 'come and eat' can be heard at the opposite extremity of this very remarkable bend.

Of the river at Hawajji-el-Khawaslik.

Beyond Hawajji-el-Khawaslik the river flows between high hills clothed with brushwood to the very

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edge of the water. As we came close upon these hills, they looked as if they must effectually bar all farther progress; and as we were speculating as to where the opening could possibly be which would take us out of this seeming *cul-de-sac*, a puff of smoke was seen on the right bank, and two balls struck the water at the same instant—one beyond, and the other rather short of the raft. Halil awoke at this moment from his siesta, exclaiming, 'C'est un coup de fusil qu'on tire sur nous!' The brushwood effectually screened the people who were making this attack, and we immediately arranged our sacks and baggage, so as to give us some cover also. Another shot followed, on which Halil seized my gun, and fired its charge into the brushwood where the smoke had appeared; and the discharge, which was buck-shot, similar to that fired on our troops from the walls of Badajoz, produced a decided effect, cutting away the branches, and no doubt dislodging the Arabs who were making this attack. Being ignorant, however, as to whether this were the case or not, we continued our onward course, rather westward of north, as far as the island of Beni-Annan, where we brought up the raft for the night.

Attack on the raft.

Defensive preparation.

Beni-Annan.

Daylight found us again floating down the stream, our course nearly south-west, through scenery very similar to that of the previous day: islands, villages, and aqueducts, and banks covered with wood, were passed in succession; and although, perhaps, implying sameness in description, there was, in reality, much quiet life and variety and beauty in this part of our voyage. During the morning we stopped for a short time at Hadisa, just as the people were swimming two

oxen across the river. This island-town contained, apparently, about 300 houses, built on high ground, surrounded by a defensible wall washed by the river. Some arches of a bridge remain, which once communicated with the mainland, to the right of which, at a little distance from the water, are two conspicuous saints' tombs.

Hadisa.

Here we had our first communication with the people along the river, an important and interesting moment for us all. The raft having been made secure, I found my way to the Sheikh's house, produced the Sultan's firman, and asked for breakfast. Meat and milk were produced at once, and the firman respectfully placed on the Sheikh's head, as well as on those of his numerous visitors who had flocked to see the Frank. Avowed duty to the Sultan and professions of obedience were plentiful; but when I came to ask, as a practical proof of the Sheikh's loyalty, that one of his Arabs might accompany me, he made endless difficulties; and I had to resist the exactions attempted to be made for the benefit of the Shammar tribe, and to resume our descent, *taking* one of his tribe with us—most unwillingly on his part—as a nominal protection against his people.

Breakfast with the Sheikh.

After quitting Hadisa, we passed some other smaller islands. The banks of the river at this part were generally bare of wood, but still pretty, owing to the numerous graceful aqueducts, which we passed on both sides. A few miles farther we floated over the rocks of Hafagia—then passed Hajji Island, and later in the afternoon we got over the formidable rocks called Fat-hat-Huddhr-Elias; and keeping clear

Leave Hadis

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of the whirlpool which they cause, we floated quietly onwards until the evening, when the raft almost touched the walls of El-Oos as we passed by it. El-Oos is an island-town of some importance, with two mosques, some flourmills, and about 250 houses. Beyond El-Oos steep sandhills border the river on either bank; but more picturesque scenery follows immediately afterwards, diversified at intervals with the usual watermills, and some of these had a tower attached to them for the purpose of defence.

Island of El-Oos and scenery

Progress of our raft.

As the stream did our work almost entirely, the two boatmen had little trouble, beyond an occasional use of their date-tree oars, to keep our craft midstream; and thus we proceeded, lazily and pleasantly, as long as there was sufficient light to take the bearings. When this failed we brought up, under the right bank, near the Castle of Riblah. Here the boatmen slept on shore, whilst the rest of our party remained on the raft; and as the disposition of the people did not seem to be too favourable, we quietly unmoored, and resumed our way before daylight. Beyond Dowalie Castle and its watermill, we came upon a more open country. The hills receded from the banks, on which were villages at intervals, and the usual aqueducts; and a little lower down-stream, we passed between Jeriat Haouran on the left, and Wadi Haouran on the right bank, near which the scenery becomes extremely attractive, especially on approaching Jibba. We found this place to be another walled island-town, with some 500 houses ensconced in a date-grove, which extends for more than a mile along the centre of the river, which is here shut in by high ranges of hills, with two saints' tombs on

Riblah Castle.

Town and island of Jibba.

their summit. The whole effect is picturesque in the extreme; indeed, for some distance below Jibba, the scenery continues to be exceedingly bold and romantic.

Wolf swims across stream.

This afternoon the usual monotony of our voyage was broken by the appearance of a very fine wolf, which passed close by the raft as he swam from the left to the right bank of the river, which is here a quarter of a mile broad. On landing, he shook himself like a dog, and scampered off as joyfully as if he had known that a deadly aim had been taken at him, and the gun all but discharged, as he scrambled out of the water.

The Aniza Arabs.

This was quite a day of incidents, for a little lower down we met a large boat, which had come up from Hit to collect timber and brushwood. Her people gave us the unwelcome news that the Aniza Arabs were in the neighbourhood, which induced us to bring to almost immediately at the island of Serajia. Next morning we found the Hit boat still employed in completing her cargo, and no fresh intelligence of the Arabs having come in, Getgood went stealthily forward to reconnoitre. He ascertained, satisfactorily, that the Aniza had moved away, and we resumed our descent at once.

Progress of the descent.

The depth of the river was very satisfactorily obtained by means of my 10-feet rod, which worked well; and our rate of progress gave me sufficient time not only to take the necessary bearings, but also to make a rough pencil-sketch of the banks, which continued to be highly picturesque. Throughout the whole distance from Anna to Hit (131 miles), we passed through a constant succession of watermills and aqueducts, villages and hamlets, which succeed each other at almost every

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fresh sweep of the river; now showing themselves between the low hills which skirt the river's banks, now enlivening the wooded islands which frequently divide its stream—which, in this part of its course, has an average width of 350 yards, a depth of 11 feet, and a current of three knots per hour in the season of floods. I counted fourteen islands during this part of our descent, many of which have small towns upon them, often built on some ancient site.

Width and depth of the river.

Scenery of the Upper Euphrates.

In some respects the scenery of the Euphrates reminded me of that of parts of the Nile, although far exceeding the latter in picturesque effect, which is very much due to the often-mentioned aqueducts, and their simple but efficient waterwheels. The last of these, which we passed during this day, was partly concealed by the dense smoke arising from the boiling bitumen of the springs of Hit, at which place we had now arrived. Our first visit was to the governor, Sheikh Mohammed, whose attire accorded well with the murky atmosphere of the place. Having read the letter which I had brought with me from Anna, he welcomed me warmly, and his 'Bismillah!' was followed by a supper of rice, after which we entered upon the question of the prosecution of our voyage. Sheikh Mohammed was placed at Hit in charge of the bitumen and other productions of the place, and he had therefore ample means of giving us all requisite furtherance.

Hit and its bitumen springs.

Sheikh of Hit.

The message brought from Anna by the Arab Getgood disposed him favourably towards us, and the production of the Sultan's firman completed the business. Sheikh Mohammed at once provided us with accommodation, and expressed his readiness to be useful to

Lieut. Fitzjames, R.N. del. G. Hawkins, lith.

Day & Haghe Lith.rs to the Queen

us in any way. Now as the raft, although most suitable in other respects, had consumed a good deal of time in descending the 131 miles from Anna, I was anxious to replace it by a more speedy mode of conveyance, and the Sheikh undertook to find what I wanted without any difficulty. Boatbuilding is an everyday occupation at Hit, and is quite as simple as it was in the time when Noah made 'an ark of gopher-wood,' and pitched it 'within and without with pitch.' *

Method of boat-building at Hit.

The self-taught shipwrights of Hit have neither docks, nor basins, nor even slips, to facilitate their labour; yet they can construct a serviceable boat in a short time, with no other tools than an axe and a saw, with a ladle for pouring out the melted pitch, and a roller for smoothing it. The first process in this primitive mode of shipbuilding, is to choose a level spot of ground, near the water, on which the carpenter traces the figure of the bottom of the projected boat—not, it is true, with mathematical accuracy, but still a line *is used*, and a certain system followed. In the space thus marked out, a number of rough branches are laid in parallel lines, and others interlaced across them. A kind of basket-work, of reeds and straw, is then plaited through them, to fill up the interstices; and some stronger branches, laid across at intervals of eight or ten inches, give the requisite stability to the bottom. The sides are then built up, which is done by driving upright posts of the requisite height through the edge of the platform, about a foot apart; these are filled in, in the same way as the bottom, and the whole is consolidated by placing strong branches,

* Genesis vi. 14.

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or stems of small trees, as tie-beams, at short intervals from gunwale to gunwale. The necessary stability being thus obtained, the outside of the boat is coated with hot bitumen, which is melted over a fire made on the ground close at hand, and reduced to proper consistency by an admixture of sand and earth.

This bituminous cement is spread over the framework of the boat, both within and without, by means of a wooden roller, which produces quite a smooth surface, and soon becomes perfectly hard, impervious to water, and well-suited for river-navigation. Some of these boats are not unlike a coffin, the broadest end representing the bow; but others are of a neater build; the reader will find them described in the second volume of the author's previous work on the Euphrates Expedition.* When laden, these boats draw 22 inches, but only 6 inches when empty.

The bitumen found near Hit appears to be still as inexhaustible as it was in the time of Herodotus. It exists in several places in the vicinity of the town. Sulphur is abundant also, and at some spots in this locality, naphtha is plentiful, and makes its way to the surface through saline tepid water, which has the appearance of boiling soapsuds. It has even a more fœtid and disagreeable taste than the Harrowgate waters, and apparently stronger medicinal properties. The natives say that these springs cure every kind of human malady.

Curative powers of the springs at Hit.

Hit contains a minareh, rising conspicuously above the mosque, and about 1,500 flat-roofed small-sized houses, built round an elevated hill. The place has a prosperous aspect. In addition to the sources of trade

* 'Expedition to the Rivers Euphrates and Tigris,' vol. ii. p. 642.

mentioned above, there is abundance of excellent limestone in the immediate neighbourhood of the town. The inhabitants find ample occupation, not only in boatbuilding, but also in the manufacture of earthen vessels of various kinds—such as those required for the waterwheels, and a kind of crock, which is placed on the roof of almost every house to hold a supply of water.

Raft replaced by a boat.

My raft was now replaced by one of the boats of Hit, and we left this town, accompanied by a man from Sheikh Mohammed, whose business was to give information about us to any curious enquirers whom we might meet. Our descent was resumed on January 9, and was carried on as before, but rather more speedily than with the raft. Still keeping midstream, with the measuring-rod let down, the bearings and features of the country were carefully noted. The scenery immediately below Hit presented no variety from that above the town, and we were carried along without any exertion being needed on our parts. The weather had hitherto been most favourable, but during the afternoon of our departure from Hit a sudden change took place, and a violent storm drove us to seek shelter in a cavern, which we most opportunely met with on the left bank, and in which we remained all night. The wind had abated the next morning, and we were able to resume our course.

A violent storm.

Mode of irrigation.

During this day the river-scenery became less attractive, chiefly owing to the substitution of large water-skins, worked by bullocks, in the place of the more graceful waterwheels and their attendant aqueducts. This simple contrivance for purposes of irrigation is, however, very efficient. The bullocks work the skins

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up and down to the river by means of an inclined plane, to give them additional power, and send a supply of water into the fields through a channel, into which the skins empty themselves. These primitive machines were very numerous on both sides of the river, and were all in full work, which made it evident that our boat was passing through a populous country. We reached the tent-village of Hemateen before dark, and remained there for the night.

Sheikh of the Bordenes.

The following morning we landed, by invitation, to breakfast with Ibrahim El-Abt, sheikh of the considerable tribe of the Bordene. He received the dragoman and myself in his spacious tent, where an ample meal was immediately served; and where I, for the first time, met with a particular dish, a mixture of butter and honey, which, from the familiar mention of it by the Prophet, must have been ordinary fare in the East in Isaiah's day,* as it is now, for I frequently met with it on subsequent occasions.

An Arab dish.

On taking leave of our host, I discovered that his marked civility was not quite disinterested; for he appealed urgently to me, to endeavour to move the Pacha of Bagdad to release his son, who had been detained in that city, as security for the payment of some 30,000 piastres, due by the tribe on account of revenue.

During the afternoon we passed the considerable town of Kalat Ramadi, which stands conspicuously on the right bank of the river; from thence we passed Meshaid, where the depth of water is little more than six feet, and halted for the night at the camel's ford of

Meshaid.

* 'Butter and honey shall he eat.' (Isaiah vii. 15.)

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Abú Serai ford.

Abú Serai, where the river is equally shallow. We went onwards, through an interesting and populous country, the next day. Bullock-rollers followed each other in quick succession, raising huge water-skins to irrigate and fertilise the land; and villages appeared at very short intervals—some consisting of congregations of tents, others of clay-built dwellings, with large cylindrical wicker-baskets to hold grain on each of their flat roofs. The people were everywhere at work, preparing their crops, and the whole country presented a most animated scene. A full share of the field-labour seemed to be done by the women, whose costume is a loose open dress of coarse blue cotton, and they wear, almost without exception, a gold ornament passed through the left cartilage of the nose. The men wear sandals, a loose-flowing cloak, and the usual bright-coloured handkerchief over their heads. It was altogether a cheerful and lovely scene, as we threaded our way through the pretty little islands, enjoying a temperature much like that of our English summer.

The River Euphrates above Felujah.

By sunset we were in sight of the bridge of Felujah, and had thus accomplished 87 miles of the descent below Hit, without any untoward occurrence. As we entered a comparatively level country, the windings of the river had become shorter and more frequent. Its average width had decreased to about 250 yards, with an ordinary depth of about 20 feet, and a current of scarcely $2\frac{1}{2}$ knots per hour during the flood-season, at which time the stream forms thirteen islands, which are chiefly devoid of wood. As we approached Felujah, the river's banks presented a very animated appearance, owing to the numerous and busy population—otherwise

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the scenery had latterly become far tamer and less interesting than during the earlier part of our voyage.. At Felujah we were hospitably received by the governor, with whose help my future plans were soon arranged.

Reception at Felujah.

I had now completed the first half of the survey, and considered it desirable that the second portion should be postponed until my return from Bagdad. The Sultan's firman secured the co-operation of Sheikh Ibrahim, and he promised to take charge of my boat during my absence. My principal reasons for deciding on this visit to Bagdad were two: my anxiety to make known to Major Taylor what had been reported about the supposed traveller at Palmyra; and my wish to have the means of laying down that part of the Euphrates which had just been surveyed, and to send home the map of this portion of the river before proceeding to the completion of my task. I therefore left Felujah early the next morning, with a small caravan, which was bound for the City of the Khaliphs.

Start for Bagdad.

The ride was a most interesting one. I passed a little to the eastward of Sifara, the antediluvian Sippara, and proceeded onwards in a line almost parallel to the Sakláwiyah Canal;* thence I crossed a plain, with but little cultivation, inhabited by the gazelle, the 'hoop-barra' (one of the bustard family), and numerous coveys of the desert partridge. Soon after leaving Felujah in the morning, we had passed Suidia or Kush, and in the afternoon we halted at Akar-Kuf—which grand monument of former days had been our landmark for several hours.

The Isa Canal.

* The Isa of Abulfeda, which, from a spot below Bagdad, has a tortuous course of 45 miles across Mesopotamia, terminating near Felujah.

This was the Akaré Nimrúd of the Arabs, and the site of the third primeval city of the Bible; * and even at the risk of being delayed beyond sunset, when the gates of Bagdad are always closed, we determined to examine these interesting remains. The conspicuous object which we had been watching for so many hours, I now found to have been a pyramid, built of sun-dried bricks, on which soft and friable materials Time had made such ravages as to have partly defaced its original form. It seems to have been constructed of layers of these bricks, placed alternately upon one another at right-angles, until a thickness of 2 feet 11½ inches had been attained. Over each portion so built, a layer of reeds seems to have been carried quite through the structure, each layer having a depth of from 1¾ to 2 inches. Over this another layer of bricks was placed—then another of reeds—and so on, section by section, until the desired height was attained.

The existing remains of Akar-Kuf measure 110 feet from east to west, and 128 feet from north to south; and it has still an elevation of 128 feet above the ground, although its top has long since crumbled away, and has now the appearance represented in one of the plates in the earlier volumes of this work.† About midway between the ground and the summit there is an entrance-door, probably the portal of the tomb, which, according to Arab tradition, is that of Nimrúd himself. Unfortunately, I had no means of getting up to this height, and as time also failed, we hastened on towards Bagdad, where, however, we did

Examination of Akar-Kuf.

* Genesis x. 8, 9.

† 'Expedition to Euphrates,' Plate VIII. vol. i. p. 119.

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not arrive until after sunset. The gates were therefore closed, and we had to pass the night outside the city.

Arrival at Bagdad.

My letter, forwarded from Anna, had prepared Major Taylor for my arrival, and nothing could exceed the kindness with which I was received, nor the interest evinced at the Residency in my project of communication with India *viâ* the Euphrates. I also learnt that, in consequence of instructions received from India, a survey of the Lower Tigris had been commenced by Lieutenant Ormsby, of the Indian Navy, with Mr. Elliott as his assistant, under the superintendence of the Resident at Bagdad—who had, in fact, already taken up this question, and thus a strong bond of sympathy existed between us.

Major Taylor strongly encouraged my project of laying down a map of the river as far as Felujah, before proceeding with my survey, and placed at my disposal, with the utmost kindness, all the advantages that the hospitality of the Residency could afford; and my long mornings were henceforth devoted to the task of mapping the river on the scale of two inches to a mile, until the appearance of the plague in the city interrupted my work.

Appearance of the plague.

At first there were only isolated cases, and all possible precautions were taken against it, but ineffectually: the terrible scourge spread not only in the city, but within the gates of the Residency itself; my servant fell a victim to it, among others, and it became a cause of *sauve qui peut* on all sides.

Major Taylor and his family decided on dropping down the Tigris to Basrah, whilst I, bent on continuing the survey of the Euphrates, started on foot for

Felujah, having with the greatest difficulty succeeded in getting one or two donkeys to carry my baggage. Whilst crossing the desert I encountered a severe storm, and learnt, to my great disappointment, on reaching Felujah, that my boat had been destroyed by it. This was no common misfortune, under existing circumstances; but in course of three or four days, the governor managed to procure a boat, similar to that which I had brought from Hit, for me; and the intervening time was most agreeably spent in exploring Sifara, revisiting Akar-Kuf, and in hunting the gazelle.

Boat destroyed at Felujah.

On April 10, all was ready for my departure from Felujah, when, at the last moment, Getgood came to say that he must return to his family—'the world,' as he quaintly expressed it, 'being topsy-turvy.' He had served me most faithfully during more than three months, and latterly he had been doubly useful, in furnishing me with the names of places, and other details for the maps. He was a serious loss to me.

Departure from Felujah.

Beyond Felujah, the Euphrates is broad and deep, and strikingly resembles the Nile in the flood-season, with the exception that the banks of the former possess much more life and animation than those of the great river of Egypt, on account of the numbers of Arabs who frequent them with their flocks at this season, for the benefit of pasturage and water. Their proximity was, however, a source of considerable uneasiness to my boatmen, and I was not myself free from uncomfortable feelings, when I remembered my isolated position. I felt, however, that my only course was to proceed fearlessly, and take my chance.

Descent of river recommenced.

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Soon after dark, some armed men of the Zoba tribe called to us to come to the bank; but trusting to the swiftness of the current, and the difficulty of taking aim in the dark, we did not *seem* to hear, and were soon out of reach of their matchlocks. Soon afterwards we were again hailed from the bank, but this time for the friendly purpose of giving and receiving news; and we learnt that the Shammar had just seized a boat, and were crossing the river a little ahead of us. We at once brought up until the morning, when, keeping our boat midstream, we resumed our voyage, and saw the fires and heard the voices of the Shammar, but were soon carried out of reach of annoyance from them.

We passed in succession the Mounds of Mohammed, which rise to some height above the left bank of the river, and Kaalat-el-Rozzia on the right; a little farther on the island of Iskenderiah, and the Mound of Abu-Tauk on the left hand, and the ruins of El-Kamah on the right; and we finally brought up at Musseyib, a town containing some 500 clay-built houses. It is situated on the left bank, and has a floating bridge with a moveable centre, to give a passage for boats. This is the first place of any importance below the Castle of Felujah, from whence it is distant 74 miles by water. The river at this place has an average width of 180 yards, and a depth of at least 15 feet. The current does not exceed 2½ knots an hour during the flood-season, when six small islands are formed in this part of its course. With the exception of the mounds, which rise above its banks at Maidain, Kaalat-el-Rozzia, at Abu-Tauk, and again behind

Musseyib.

Musseyib, its course is through a flat but populous country, the people dwelling partially in tents, but more frequently inhabiting clay-built houses.

There was some delay in getting the bridge opened for us, and a good deal of annoyance afterwards from two or three men, who forced themselves into our boat, apparently with the intention of taking possession of her, and remained on board until we reached the Mounds of Babel. The lights of Hillah were now visible, but as a good deal of firing was going on in and around the town, we thought it prudent to remain where we were for the night. Morning brought a cessation of the desultory warfare which was going on between the Pacha's troops and the people of Hillah, to which place I now proceeded, and found, on my arrival, Major Taylor's pretty little schooner ready for my reception. I consequently discharged my native boat, and made immediate preparations for continuing my descent. Letters to the Arab sheikhs along the river were all-important; I therefore made my way through the excited populace to the castellated barracks, where I found my friend Martinelli,* who, being one of the Pacha's most confidential officers, had the means of rendering me valuable assistance.

The Mounds of Babel.

Arrive at Hillah.

During the unavoidable delay attending the preparation of these letters, I devoted two days to the ruins of Babylon, accompanied by Signor Martinelli, whose local knowledge and practical experience rendered him an admirable guide. The most remark-

Visit ruins of Babylon.

* Martinelli held an important employment under the Pacha of Bagdad when I reached that city in 1831.

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able remains of the great primeval city are at a short distance inland from the left bank of the river, and here three of the four great quarters of Babylon can still be traced—viz., Amram, the Kasr, and the Mujellebéh.

Babylon and its remains.

Four quarters of the city.

Heimar is supposed to be the fourth quarter of the city, although its distance of six miles from the river has thrown some doubt on its identification. This portion now presents merely a mass of undistinguishable ruins, with the single exception of a tower, which bears some resemblance to the famous Birs, though on a much smaller scale. We visited the other three quarters in succession, going from south to north. Amram came first—it consists of an extensive quadrangular mound; next to this is Jim-Jimma, and more to the north, again, are some considerable and almost circular mounds. Beyond these we come to the Kasr, or palace, the site of which is marked by numerous fragments of glass, and of ornamented stucco-work. Here also are the massive square buttresses of the Hanging Gardens, which have for centuries resisted the effects of time, and will continue to endure for ages to come—being constructed of the finest yellow bricks, united by a peculiarly durable kind of cement. A single tree of the cedar family still remains, and reminds the traveller, by its loneliness, that 'Babylon the Great has fallen!'

The Kasr.

The Mujellebéh.

To the west of these remains of the celebrated gardens is the Mujellebéh, once Babel. A very remarkable feature in this portion of the ruins is a projecting work placed below the summit of each angle, in the form of three semicircular towers connected

together, and giving what in modern times would be a flanking defence. Some apertures, leading into descending passages, appear here and there on the surface of this mound; one of which, near its northern face, is well known as the 'Lions' Den.' I had gone down this passage for some distance without any idea of danger, when the unmistakable odour of wild beasts made me retrace my steps with all speed, lest I should encounter another lion in closer quarters than the one I had seen from the raft. My examination of this subterranean passage was necessarily imperfect; but as I had descended leisurely, I had been able to ascertain that its sides were formed by solid brick walls cemented with bitumen, and that it was arched overhead—thus proving that the knowledge of the arch in architecture goes back to the very earliest periods.

The Lions' Den.

The Mujellebéh presents an oblong figure, its sides nearly corresponding to the four cardinal points. The two longer ones face the north and south, and are each 200 yards long, and the shorter ones are, respectively, 180 yards to the east, and 130 yards to the west, in length. The summit of the mound is now somewhat irregular in point of elevation. It measures 180 feet at its highest point, and 130 feet at the lowest, where it has been worn away by time, and the influence of the atmosphere, &c. It is impossible to convey an impression, by any such description as the above, of the deep interest attaching to these ruins, which 'will never more be inhabited, neither shall the Arabian pitch his tent there, but wild beasts and doleful creatures shall dwell there;'* and the present desolation of this spot, so

Dimensions of the Mujellebéh.

Babylon to be desolate.

* Isaiah xiii. 20—22.

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faithfully pictured by the Prophet, when contrasted with the fertility of the surrounding country, fills the mind with solemn thoughts of the exact fulfilment of prophecy, which meets us so strikingly in many instances in the East, but nowhere so forcibly as when standing amidst the ruins of Babylon.

Warfare at Hillah.

Firing still continued at Hillah, especially at night, and I had moved to the opposite side of the river, in the hope of quiet; but the balls were continually flying over me, although I found that, when lying down, I was sufficiently below their line to be secure from danger. The annoyance, however, was considerable, but, my crew being absent, I had no alternative but to remain alongside the jetty until morning. Meantime, Signor Martinelli had procured the requisite letters to the authorities along the river; and my few preparations for defence being completed, I prepared to leave

Leave Hillah.

Hillah, my little *canji* passing through its floating bridge, and pursuing its way down-stream, which is here both deep and wide, and is bordered by numerous villages, surrounded by gardens, and almost hidden by luxuriant date-groves. Notwithstanding many irri-

Descent from Hillah.

gating channels, for purposes of cultivation, and the two more considerable diverging canals—that of Sidra Shatt, going to Samania, and the Yusufiyeh, to New Lamlum—the river maintains a depth of fully 12 feet, and an average width of 160 yards, between Hillah

Diwanyah.

and Diwanyah. This place is 75½ miles below Hillah, and has a floating bridge, and about 1,200 houses. Here we were delayed for one day by a violent breeze, almost amounting to a storm; but as soon as it subsided, we resumed our course, the river below Diwanyah

barely exceeding 120 yards in width, but still keeping its depth of 12 feet, as far as its bifurcation at Old Lamlum; which was once the Chaldean Lake, the waters of which extended, at the height of the season of flood, to the rising ground at El-Karayem.

Old Lamlum.

We were provided with a letter, which we hoped would ensure civility from the redoubted Khezail, a tribe of Shiahs from the heart of Persia, who inhabit the country adjoining this part of the river; and we therefore ventured to follow its principal branch, having made, by its windings, 27 miles to New Lamlum.

This singular town contains, during the flood-season, some 400 huts, neatly constructed entirely of reeds; but at the moment of my arrival, the somewhat unusual height of the river had forced its inhabitants to go elsewhere; and we found them hastily removing their portable dwellings to more secure sites, and transporting their women and children in their canoes, which are constructed of very light materials, and covered with bitumen, and can be paddled along with great speed. A few of these curious mat-houses, however, still remained, on spots uncovered by the water, and that of the Sheikh, who was absent at the time, was among them.

Description of New Lamlum.

Thus far, all had been smooth. But we were now in the midst of the followers of Ali, who, in the absence of their Sheikh, soon showed an inclination to make the most of what, they said, 'God had sent.' During the afternoon they made forced exactions, in the shape of coffee, sugar, clothes, and money—which became more and more decided, as the day wore on,

Annoyances at Lamlum.

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until my death even was threatened if their demands were not satisfied in the morning. Although money rather than blood was their object, my reduced means made it almost impossible to satisfy them, when the Sheikh's return during the night so far improved my position, that after making a search, and taking the remnants of my money and other things—with the exception of a mere trifle of silver and my watch, which escaped owing to its being accidentally beneath a towel—he allowed my boat to proceed, one of the tribe being sent with us as far as El-Karayem.

Exactions of the Shiahs.

The river at El-Karayem.

At this place the two branches of the river, which separate at Lamlum, reunite, and here also the marshes terminate, and with them the singular tract of country belonging to the Khezail. After the junction of its two arms of water at El-Karayem, the Euphrates resumes its former grandeur, and at El-Khudhr, which is 49½ miles from Lamlum, it is already 200 yards wide. In its onward course it forms several islands, and, with some increase to its waters, flows through a fertile country—its banks studded with numerous villages of either mats or tents, embosomed in luxuriant date-groves.

Storm at El-Arja. The *canji* submerged.

At one place (El Arja), we encountered a sudden gust of wind, which placed the *canji* in some danger. She was lying along the bank, and I was alone in the cabin, when a sudden squall caused her to roll so much that the cabin was filled with water—so instantaneously, that I had only time to gather up my papers and jump on shore, when she went down.

Happily, the storm was of but short duration; and the boat having been baled out, we continued the

descent to Sheikh-el-Shuyukh, an important town permanently occupied by the Arabs. It is 64½ miles from El-Khudhr, and contains about 1,500 houses, built, as usual, of clay, on the right bank of the river. CHAP. V. Sheikh-el-Shuyukh.

Here I had the pleasure of meeting with Mr. Stocqueler,* lately editor of the 'Bengal Hurkaru,' from whom I received intelligence of Major Taylor, and heard of the spread of the plague amongst his suite and elsewhere.

Our descending voyage was resumed next morning, and the following afternoon we arrived at Kurnah, a considerable town occupying the apex of the triangle between the two great rivers Frat and Diglath. It is admirably situated for commerce, as well as for the defence of the approach to both rivers. It is only 62½ miles from Sheikh-el-Shuyukh. The portion of the river just described usually exceeds 250 yards in width, with a depth of about 18 feet. It is fringed with a rich belt of date-trees,† overshadowing numerous villages. Reach Kurnah. Euphrates and Tigris.

A little below Kurnah, the united waters of the two great rivers, now the Shatt-el-Arab, receive the Kerah or Kerkhah, a considerable stream having its source in the mountains of Ardelan.

After this accession to its waters, the course of the Shatt is south 34° east, as it flows on between date-groves and villages to Basrah, carrying a depth of 21 feet, with an average width of 600 yards. Date-groves on the river-bank.

I found a Turkish man-of-war and some English

* Now Mr. J. H. Siddons. As Mr. Stoqueler he published several works on Indian affairs.

† The dates produced along this part of the river are considered the finest in the world.

CHAP. V.

vessels anchored off Basrah, and my little boat followed the course of the winding canal leading to the Residency, where unpleasant news awaited me.

Vessels off Basrah.

The anxiety which I had felt respecting the welfare of Major Taylor's family, ever since I had separated from them at Bagdad, proved to have been well-founded, for I now learnt that there had been cases of plague, and even death, in each of their boats. This terrible scourge had now reached Basrah also, and seemed to be spreading in all directions, which greatly increased my difficulties.

Spread of the plague.

One very important object had been attained—the Lower Euphrates had been surveyed, but the state of the upper part of the river still remained to be ascertained; and the direct route being no longer available, on account of the plague, I turned my attention to another line, and made my preparations for following the route by Bushire, in order to carry out my original purpose.

About to leave Bushire.

My preparations being made, and a farewell visit paid to the Taylor family at Maghil, I left Basrah in a fast-sailing Persian boat, and following the tidal waters of the Shatt to its estuary, we crossed the upper part of the Persian Gulf, and anchored in Bushire Roads towards the evening of May 5. Here, however, I was to encounter fresh difficulties. An armed boat came to us at once from the Persian guard-ship,* to forbid our landing, since we had come from a plague-infected locality; and I thus found myself again placed in a difficult and embarrassing situation.

* The 'Sheikh Ali of Roussoul.'

CHAPTER VI.

ASCENT AND DESCENT OF THE RIVER KARUN—JOURNEY THROUGH PERSIA AND ASIA MINOR—EXAMINATION OF THE COUNTRIES BORDERING ON THE UPPER EUPHRATES.

THE circumstances in which I now found myself placed scarcely seemed to leave me any resource whatever. The routes by Bushire and through Arabia were equally cut off, by the prevalence of plague, and the alternative of living in the boat was not by any means an agreeable one. Happily, however, one other course remained open to me. The Residency boat anchored within speaking distance next morning, and brought me a message from Captain Hennell, to the effect that, as Persia was still open in another direction, my homeward journey might still be accomplished through Shuster, and that he was ready to secure boatmen and make all necessary arrangements for me. I accordingly recrossed the Persian Gulf to Mohammerah, which was fortunately still free from plague, and therefore available as a starting-point.

Difficulties attending a journey through Persia.

Proceed to Mohammerah.

Mohammerah contains about 800 houses, built on the right bank of the Karún, close to its junction with the Frat; it is a depôt for the trade of Southern Persia, and therefore promised to afford the means of furthering my plans. A letter of credit on Shuster was speedily obtained, a swift boat engaged, and with exhilarated

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spirits I commenced my voyage up the Karún. Three days of alternate sailing and tracking along the bank brought us to the small town of Samania, a distance of 45 miles: thus far the river was deep and free from impediments, with a width of from 250 to 300 yards. But from this point I decided to proceed by land, to avoid the loss of time inevitable in following the tortuous windings of the river, notwithstanding the prevailing great heat, now extreme; and four well-armed men being engaged, we rode across the country to Ahwaz, on the Karún. I carefully examined the rocky impediments to its navigation, and resumed my journey by land, reaching the ferry across the river at Band-i-kir about noon next day.

Samania.

Ahwaz.

Band-i-kir.

Here I discovered, to my cost, that my escort had come with an object of their own. Whilst waiting for the ferry-boat under the shade of a carob-tree, they decamped, taking with them my pistols, and part of my clothes, containing my supply of cash. My position on reaching the town, under these circumstances, was not very enviable; but at length, by leaving some of my wearing-apparel as security for payment, I obtained horses to take me to Shuster the next day. Here I took up my quarters in the Great Khan. My letter of credit enabled me to obtain a sufficient supply to pay for the horses and release my clothes; but beyond this there was a great difficulty about money, and I had to give up my watch in order to obtain a very small immediate supply of cash. The city, however, was free from plague, and after a few days' delay my financial difficulties were all

Robbed by my escort.

Shuster.

relieved by the kindness of the governor,* who also allotted to me a 'surdab,' or underground apartment, where I was enabled to carry on my work of laying down a map of the river with comparatively little inconvenience from the great heat. The town of Shuster, however, did not furnish any kind of table; but the lid of the map-case, and parts of the tent-poles, put together by a Persian carpenter, answered the purpose. My work went on uninterruptedly until June 2, when a map of the lower part of the Euphrates (on a scale of two inches to a mile) was forwarded, through Major Taylor, to our ambassador at Constantinople, Sir Robert Gordon.

Map of the river laid down.

Map of the Lower Euphrates sent home.

I had to wait at Shuster for the departure of the caravan for Kermanshah, and was thus enabled, after despatching my map to England, to see something of this interesting town and its environs. It occupies a very striking position between the two principal arms of the Karūn, and the ingenious works which have been constructed to give a supply of water to the city, are of great interest.

Description of Shuster.

At the time of my visit (in 1831) Shuster contained about 15,000 inhabitants, but the subsequent ravages of the plague had scarcely left half this number at the close of 1840.

Its population.

Many of the buildings—such as the great mosque with its four minarehs, and the bazaars—are deserving of special attention. The houses are solidly built, and usually have the important addition of 'badgirs,' or wind-towers. These are carried well above the houses, and have vertical apertures on each of the four sides, with interior cross-divisions for the purpose of sending down

Buildings.

* Mirza Abdallah Beglér Beggie.

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the cooler air to the subterranean apartment, which thus obtains a more moderate temperature during the heat of the day.* The two branches of the Karūn surround the city, as it were. The western arm rises in the Koh-i-zerd, and flows through the western part of the town, and onwards to Band-i-Kir, where it is joined by the eastern arm, known as the Abi-Gargar. This latter branch continues its course eastward, passes between the city and its suburbs, and eventually joins the western arm at Band-i-Kir.

The Koh-i-zerd mountain and Abi-Gargar river.

Several of the 'kanats,' or underground canals, for which Persia is so remarkable, terminate at Shuster, after a very lengthened course. They are frequently carried at a considerable depth beneath the surface, sometimes exceeding 100 feet.

Water-works of Shuster.

The town also contains several watermills, by means of which part of the waters of the western branch of the Karūn are raised to the higher level of the Abi-Gargar, into which they are carried through channels cut through the rock, after supplying the higher portions of the city.

Besides these extensive waterworks, Shah Shapūr constructed the vast reservoir here, known as the Shadervan, as well as the great 'bund' (or dyke) which bears his name. The handsome bridge built upon this mound, under which the water passes, was also the work of this monarch, whose comprehensive genius did so much for the improvement of his people.

The 'bund.'

After exploring Shuster, my object was to visit the interior of Khuzistan, and especially to see something

* I found 10° of difference between the temperature of the ordinary apartments and that of the 'surdab,' or subterranean apartment.

of the higher portions of those rivers, whose embouchures I had passed during my recent ascent of the Karūn. I therefore joined a small caravan destined for Dizful, and crossed the Abi-zal, a tributary of the River Diz. We traversed a cultivated plain, and towards evening saw Dizful rising above the left bank of the former river. We entered the city by a fine bridge. A house, with the almost indispensable luxury of a 'surdab,' was immediately allotted by the governor for my accommodation, and I had the means of examining the capital of Khuzistan and its neighbourhood with every advantage.

Abi-zal river.

Dizful.

The site of the capital of the once mighty Empire of Assyria was, naturally, a leading object of interest to me; and when still at the distance of three or four miles from Dizful, the remains of Shushan appeared, rising above the plain like a flat-topped mountain, with quite a range of lower hills stretching from it towards the SW.

Site of Shushan.

Even their distant view was very impressive; but when seen from the great platform of the mound itself, these vast ruins could not be contemplated without feelings almost amounting to awe. They have, however, been too often and too well described to need more than a cursory notice here. A general idea of their grandeur may be conveyed to the reader by the fact that the dimensions of the mound, by my pacing, were 1,700 yards long by 570 yards wide, and that its extreme slope from the ground was 170 feet at an angle of 70°.* The fragments of bricks, tiles, and

Its ruins.

* Plate XXXII. vol. ii. of 'Euphrates Expedition' is from a sketch taken on the spot.

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pottery (of bright blue and green colours) with which it was strewn, in addition to its steep slope, prove that it is an artificial mountain of accumulated ruins, probably those of Shushan the Palace (now Sus); whilst to a distance of some three miles to the southward, and at an average height of eight feet above the plain, extend ranges of elevations with deeply-furrowed sides and a serrated crest, marking out the remains of the once splendid capital of 127 provinces.

Tomb of Daniel.

On the bank of the Shapūr, which washes the base of the great mound, is the famous tomb of Daniel. At the time of my visit it still contained the black stone, with its remarkable bilingual inscription, which was afterwards blown to pieces by some Persian fanatic, lest it should fall into the hands of a Giaour; for the belief prevailed that an attempt had been made to remove it, in order to send it to Sir Robert Gordon, then at Constantinople. I did not myself see the stone, for, owing to the existence of plague in the vicinity, prudence induced me to halt on the threshold of the tomb.

Pleased and impressed by my examination of the site of Shushan, I retraced my steps towards Dizful, but reached it with some difficulty, owing to a feeling

Illness at Dizful.

of illness which increased towards the end of my ride; and finding myself still worse next morning, I sought the advice of the first medical man of the city. On perceiving my uneasiness, he called out, and repeated most energetically, 'No plague;' and having used his lancet somewhat freely, he proceeded with medical treatment, which was continued till the attack—whether ordinary

Lt Col. J.B. Estcourt 43rd L.t Infantry ___ Worsley lith

Day & Haghe Lith.rs to the Queen

ARMALLE ON THE RIVER KARÚN .

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typhus-fever, or its extreme form of plague* — was overcome. Happily, there soon was a change for the better when I returned to Shuster; but finding myself scarcely equal to a land-journey, I obtained a country boat, and descended the eastern branch of the Karūn to Band-i-Kir. Here it is joined by the western arm, and shortly afterwards, their united waters are augmented by the River Diz. About eight miles lower down we passed the small town of Weis, on the left bank, opposite to which is the dry bed of a river, supposed to have been once part of the channel of the Shapūr, or Shawūr. Thence the descent was continued, sometimes sailing, at other times being tracked, without meeting any impediment until we reached the bund at Ahwaz —which, however, was passed by our boat† without difficulty, it being quite under water. Beyond this we found no obstructions, and passing the second dry channel of the Shapūr, on the right bank, and on the following day the considerable town of Ismaili, on the left, we continued to drop down this now tortuous stream, by Kút-el-Omrah, and thence to Sablah, a small village on the left bank, which is rather remarkable, as being the point from which the Karūn-el-Amarah (or Blind Karūn) takes its departure. This river passes the town of Kaban after completing two-thirds of its course, and enters the sea at Dorakstan by two branches, which were dry at this season. The fleet of Nearchus must, apparently, have ascended by

Return to Shuster.

Descent to Band-i-Kir.

The bund at Ahwaz.

The Karūn-el-Amarah.

* My late friend Dr. Baigrie, whose experience of plague as well as typhus had been extensive, regarded the former as the extreme stage of the latter, when exposed to a warm climate. Dr. Baigrie afterwards himself fell a victim to the terrible disease, while devoting himself to the relief of those attacked by it. His treatment was often eminently successful.

† The boat was 66 feet long, about 7 feet beam, and drew 5 feet water.

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this channel to Susa; but its former waters are now conveyed, by a fine canal, to the town of Dorak, whence they flow into the River Jerahi.

Town of Dorak.

Continuing our descent from Sablah, we passed luxuriant and almost continuous date-groves, till we brought up at Mohammerah, after a descent of about 230 miles from Shuster to that place. A little short of the town, the Karūn makes an abrupt turn, almost at right-angles, and takes a south-easterly course, under the name of the Bah-a-Mishir, till it falls into the Persian Gulf, nearly 20 miles to the eastward of the Frát. This was the course of the whole body of water of the Lower Karūn, until the skill of the ancient Persians in the management of water enabled them to make a most beneficial change by cutting the Hafar Canal, a noble work both in depth and width, which has opened a communication, through the Euphrates, to or from the Indian Ocean on the one side, and to Mesopotamia on the other.

River Bah-a-Mishr.

Cut made into the Euphrates.

Once again arrived at Mohammerah, a boat was quickly obtained; and in four days more, I was under the hospitable roof of the Resident at Bushire, Captain Hennell, who was deeply interested in the furtherance of the Euphrates question.

Arrival at Bushire.

Hitherto my wanderings had been almost entirely solitary, but a companion now offered to join me—De Borowski, a Pole, who had recently arrived from India to seek employment in the Persian service.* Our joint arrangements in providing horses and mules were soon made, and on July 27, we commenced our intended journey of about 830 miles to Tabriz. Our first

* This he succeeded in obtaining, and eventually lost his life during the protracted siege of Herat (1838).

halting-place was the khan of Doriky. We travelled by night, on account of the heat; and after leaving Doriky, and fording the Rūt Hana river, we commenced a steep ascent over shelving slippery rocks, with here and there a parapet-wall on the side of the precipice. Four hours—through rugged rocks and other impediments, so great that this passage could scarcely be forced by an invading army—brought us to Kamarij. This small town contains about 150 houses, and is perched almost at the summit of the pass, which is 2,800 feet above the plain.

Doriky.

Kamarij.

Descending by a winding road, we passed the villages of Tungo-Turcūn and Shapūr. The latter contains barely 50 mud dwellings, on the site of the once great capital of Persia, the massive sculptures of which (according to Morier) still occupy a space of six miles in circumference in the Valley of Shapūr. Judging from the figures with which these sculptures are ornamented in relief, they would appear to have belonged to the highest period of Persian art. One of the most striking of these monuments is a colossal statue, of 20 feet in height, which is lying prostrate in a spacious cavern. In addition to these, there are other remains of former times; for numerous air-shafts along the valley show that a line of 'kanats' has been carried beneath its surface from the site of ancient Shapūr to the city which appears to have replaced it—namely, Kazerūn. This place occupies the eastern side of the valley, and is traversed by a river and some canals. It contains two squares and three mosques, with cupolas swelling outward towards the base in the Roman style, and nearly 2,000 houses, which are constructed in the light open style of architecture so general in Persia.

Shapūr.

Colossal statue.

Kazerūn.

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Going SSE. from Kazerūn, between two ranges of rocky mountains about a mile apart, in less than two hours we reached the tomb (or rather monument) of Tamerlane. This occupies a niche in the rock at some ten paces above the ground, and it contains five or seven figures in basrelief, the most prominent of which is Timūr himself and his caillon or pipe-bearer. The prince is represented grasping a lion firmly with the left hand, and is about to slay the animal with a hanger which he holds in his right. The other figures are armed, but are only looking on.

Tamerlane's tomb.

Leaving these remains, we passed a small lake enclosed by high rocky hills, and turned northwards up a steep zigzag ascent, having sloping ramps at intervals. This brought us to the summit of the lesser Pass of Kurtal, from which we descended to the khan of the same name, by a shelving rocky path bordered by trees on both sides. This khan is situated at an elevation of at least 1,000 feet above the plain. Thence we had to scale the higher portion of the Kurtal Pass, the summit of which we reached, after two hours' climbing over shelving and often rugged rocks, and forthwith commenced the descent. At some distance from the summit we came upon an abundant stream, flowing from the north-east, and subsequently passed through the village of Distergé, consisting of about 200 houses, and the khan of Zigané, to the plain, and proceeded onwards to Shiraz.

Kurtal Pass.

Shiraz.

The position of this city renders it very striking. It stands in the centre of a well-cultivated mountain-basin in the midst of luxuriant gardens of roses. It is defended by a high wall flanked by semicircular towers, and

Col. D'Arcy, R.A. del.

Fairland lith.

THE ENTRANCE TO SHIRAZ FROM ISFAHAN.

contains an ark or citadel, twelve or fifteen mosques, extensive bazaars, numerous caravanserais, and about 40,000 inhabitants. In its immediate vicinity is the tomb of Sadi.*

Population of the city.

Shiraz, although holding an inferior position to Teheran, is in reality the most important city in the kingdom. It is the capital of the province of Fars, or Farsistan, which gives its name to the modern kingdom of Persia, and contains in itself more places of historic interest than all the rest of the Shah's dominions. Fars has a superficies of nearly 220 square miles, or about 44,335 geographical miles, and is defended by an almost continuous barrier of lofty and rugged mountains.

Province of Fars.

During our examination of Shiraz, we were subjected to some little annoyances and even hostilities from the common people, but the better classes seemed to be kind and hospitable. We visited, among others, one Hajji Mirza Mahommed, a merchant, whose reception-room was approached through a court shaded by orange-trees. The room was tastefully ornamented with stucco-work and stained-glass, the floor was covered with a carpet from Yezd, and the table with a rich blue-and-white cloth from the same city. The repast commenced with coffee served in the Turkish style, with milk and sugar also. This was followed by a table loaded with melons, peaches, pears, and an abundant supply of very choice sweetmeats. Tea, served with milk and sugar, followed; and when taking leave, our host presented some attar of rose to each, and, with that courtesy which has given the Persian a claim to be regarded as the Frenchman of the East, expressed his disappointment

People ill-disposed.

Visit a Persian merchant.

* See Plate XII. in vol. i. of 'Euphrates Expedition.'

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'that we had not made his house our own, and that we had not given him an opportunity of being more serviceable.'

Our stay at Shiraz terminated with this visit, and we started in pursuit of the caravan, which had left whilst we were endeavouring to obtain mules for our baggage. We passed the tomb of Sadi, and examined its rude paintings, one of which represented Abraham offering up Isaac; and proceeding to the north-east, through the mountain barrier, we traversed rich fields of grain and of the castor-oil plant, and halted at the village of Zergan, in sight of Persepolis.

Tomb of Sadi.

Village of Zergan.

Here we had quite a scene with the natives, in consequence of having slightly cut my hand whilst at breakfast. The Persians have the greatest repugnance to the sight of blood, and, to pacify them at all, I was forced to abstain from breakfast altogether; and even after that concession to their feelings, we had great difficulty in inducing the four men, whom we had engaged to accompany us to the ruins, to go with us. They talked continually of impending danger, and their fears went so far as to cause two of our escort to turn aside, and leave us almost immediately. We, however, persevered in our determination to visit the ruins, which already rose before us—the remains of the matchless Persepolis, the most detailed examination of which only deepened our first impressions of their great beauty.* I will not, however, linger over their well-known description, merely mentioning that we devoted the greatest care and attention to the examination of

Cut finger.

Ruins of Persepolis.

* Plates LI. and LII. 'Expedition to Euphrates and Tigris' (vol. ii. p. 620), from a drawing furnished to the author by the late Colonel D'Arcy, give a general view of these ruins.

the site of this city, and then prepared to return to Zergan. CHAP. VI.

As we were crossing the adjoining marsh—where we disturbed whole flocks of cranes, cygnets, and flamingoes—our meditations on the ancient Empire of Persia were unpleasantly interrupted by the sight of several armed men coming rapidly towards us from some higher ground. Borowski was a little in advance, and his back turned towards them. I shouted to him to look out for an attack, and hastened towards him; and we moved on, keeping at a short distance from each other, prepared for mutual protection. We were each menaced by six men in the one case, seven in the other, all armed with bludgeons. In this way we passed through a field of tall standing corn, when Borowski suddenly called out, in his peculiar way, that 'some gentlemen were coming up with guns.' Turning round, I saw three armed men hurrying up to cross our path, but we just managed to head them, although Borowski was all but cut off; and thus protecting each other, we continued the 'retreat of the two,' as my companion expressively called it, until we reached the village in safety. The inhabitants expressed great joy at our having escaped a danger, which they no doubt had had a share in preparing for us, and which would have verified their ominous prognostications of the morning. Threatened attack.

Our caravan was augmented by an escort taking a large sum of money to the royal treasury at Teheran, but this addition proved to be a source of danger rather than of security. We marched during the night, and our first halt was at Mayen, a small town surrounded by walnut-trees, and having a range of Treasure escort. Halt at Mayen.

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rocky hills on either side. During the following night an attack was made on the Shah's treasure, and his bags of tomans had been almost carried off by armed men, when the screams of 'Frangi—Frangi!' from the eunuch in charge, made us hasten to his assistance. Our party soon became the assailants in their turn, and the robbers ran off, leaving three guns, some donkeys, and other property behind them.

Attempt to rob the caravan.

Mayen contains only about 150 houses, and has the usual protection of a circular mud wall. Great precautions for our safety were taken, on resuming our journey, especially while skirting a succession of bare rocky hills. During the night we passed the spacious well-built caravanserais of Kūzigan and Chemadoya. The latter, as well as the surrounding country, had been deserted, in consequence of the inability of the Prince of Shiraz to protect the inhabitants against the exactions of his elder brother, Abbas Mirza.

Kūzigan and Chemadoya.

Yezdiskast.

We reached Yezdiskast by daylight, and found it to be a remarkable castellated town, occupying an isolated rocky tongue of land, about 600 yards long by 150 yards wide. It commands the opening into a valley, which cuts like a fissure into the plain we had just crossed. The walls of this stronghold rise about 250 feet above the small river which washes their base, and is crossed by narrow drawbridges, the only means of access to the place. The earthen ramparts immediately above these walls bore ample marks of Abbas Mirza's recent futile attempts to reduce the town. Being destitute of artillery, he sought to effect a breach by continuous volleys of musketry, but, as may be supposed, without any

Its position,

and siege by Abbas Mirza.

result, beyond that of a useless expenditure of ammunition. We were not allowed to enter the town to procure food; our supplies were therefore limited to a few pigeons, killed by my companion's gun, for supper; and on the following morning we reached the considerable town of Homisher, and put up at a commodious caravanserai, built (as is usual in this part of Persia) of sun-dried bricks. The monotony of our journey was here enlivened by a meeting with Baron D'Acht, a Russian employé, who had halted at Homisher to pay his respects to Abbas Mirza. We spent the evening together, after which we resumed our journey, and on the following afternoon we were cheered by the first sight of the glittering cupolas and tapering minarehs of Ispahan.

Homisher to

Ispahan and the environs.

Hospitality awaited me in the house of Padre Denderich, a Roman Catholic priest, and under his auspices I had a most favourable opportunity of seeing the city and its environs. In order to get a good general *coup-d'œil* of the capital, I ascended to the gallery of the Talat, whence a most extensive panoramic view is obtained. A circular rugged mountain barrier forms the background to a rich plain of about 29 miles in width. This plain is studded in every direction with towers, which I ascertained to be dovecotes for the supply of the city; while its surface is pierced with openings into the tunnels, or 'kanats,' which are skilfully constructed underground, in order to bring, by various converging lines, the requisite supply of water for the town.

Panoramic view of the city.

In the city itself the most conspicuous buildings, as viewed from the Talat, are its two strongholds or

Principal buildings of Ispahan.

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citadels, and its seven royal palaces and their gardens, of which the Chehel-el-Letorin is the most remarkable. Extensive caravanserais and some miles of bazaars, constructed in the days of Shah Abbas, were also prominent objects, as well as the Maidan Shah or Great Square; but the gilded cupolas of the numerous mosques, swelling out towards their base, were the most striking objects in this extended picture. The river Zend-i-rūd, with its winding course, and crossed by four bridges within the city, adds much to the beauty of the scene. One of these bridges is a fine specimen of the Persian style of architecture. It is 164 yards long by 25 yards in width, and rests upon 25 very light pointed arches. In the centre is a very wide covered carriage-way, and on either side of this, at a somewhat higher level, there are footways, also protected overhead from the sun's rays.

Zend-i-rūd river.

Grand bridge.

The city itself, however, on closer inspection, destroys the illusion raised by the more distant view. The once well-kept gardens and noble palaces of the time of Shah Abbas are hastening to decay, and since Teheran has become the seat of the Court, even the mosques, baths, and caravanserais of Ispahan have been neglected. The bazaars alone still retain some of their former activity and life. Those portions of their extensive covered-in winding streets (which formerly occupied a space of three miles) which are still inhabited, have full employment in providing for the wants of the people, although the population had diminished, from 600,000 in the time of Chardin, to less than 150,000 in 1831.

Decay of Ispahan.

Its population.

At the time of my visit to Ispahan, great excitement

prevailed, in consequence of a victory gained by the Poles over the Russians, which was then deemed to be of the greatest importance to the future of Persia. The favourite project for turning this to account was a combined movement of the Persian and Turkish forces, for the purpose of setting Poland free, of driving the Russians beyond the Caucasus, and of regaining the territories lost, in later times, on both shores of the Caspian. My companion was naturally quite carried away by this prospect of the resuscitation of Poland, and the brightest visions filled his enthusiastic brain.

Warlike designs against Russia.

On September 3, we left Ispahan for the royal camp, hoping to ascertain whether there was any real intention of taking part in the Polish war; visiting the tomb of Baba, and the trembling tower, on our way to Amenabad, the site of the royal camp. We found a regiment under arms on either side of the Shah's tent, which was of crimson cloth, very spacious and open to the front, in consequence of which we had a good view of His Majesty. He wore a dress of fine grey cloth, and was seated on a cushion, his ample beard reaching to his waist. Immediately behind him was a spacious square enclosure of crimson cloth, on the sides of which figures of soldiers, as if under arms, were painted; behind this, again, were the various tents of the harēm.

Our departure from Ispahan.

The Shah's camp.

The next morning we visited the camp of Abbas Mirza, which was at a short distance from that of the Shah, and were at once presented to the Prince. He was on a divan, in the back part of a tolerably roomy tent, and his appearance, though less striking than that of the Shah, was still dignified. His attire was far

Camp of Abbas Mirza, and our reception.

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richer than that of his father. He had a brace of pistols beside him on his right hand, which we were informed were kept loaded in case of any sudden emergency. There was a railing in front of his ottoman, outside which his visitors and part of his suite were placed. Finding that I belonged to the Royal Artillery, the Prince at once enquired after Colonel D'Arcy and Major Stone, who had both been formerly employed in Persia. He then adverted to the Polish war and to the means of giving assistance to the Poles, and after a lengthened and interesting conversation, we withdrew.

Interview with the Prime Minister.

The next morning, at a very early hour, we were summoned to an interview with Mahomet Ali Mirza Khan, the Prime Minister. We found him occupied in dyeing his beard with henna, but he at once entered on the subject of the Polish war, and suggested the joint advance of the Persians and Turks, in the first instance, and an application to Great Britain for assistance, through her Envoy at Tabriz.

Visit the Tak-i-Rustam temple.

During our stay in the camp at Amenabad, we made an excursion to the ancient Guebre temple of Tak-i-Rustam, which is situated on the summit of one of the surrounding mountains. It consists of three caverns, of which that on the western side is the most interesting. It is about 45 feet in length, divided midway by a low wall, from side to side. The deep red stains on the walls of this excavation—remains of the ancient painting—are still partially visible. In the outer cavern are several figures, cut in bold relief—others are quite detached from the rock. The fire-temple itself is in the innermost cavern; its base is 9 feet square by 4 feet high, with 9 square niches on each side, containing

remains of small and now almost effaced figures. A moderate-sized dome rests on this platform, the summit of which, as well as the rock above it, bear marks of the flame, once perpetually kept burning. The walls still show traces of a coating of yellowish cement, and in the farther cave are the remains of a figure, apparently that of a man, and one of a bird resembling an owl. There are also some sentences in Aramaic, and in other still more ancient characters.*

Preparations for war with Russia.

We left the camp in all the bustle of preparation for the coming hostilities with Russia, and, passing again through Ispahan, resumed our journey. We soon came up with the Prince's half-Asiatic, half-European army, and continued with the troops the whole day. The Persian soldier is easily fed, consequently little baggage and few animals are required; a single donkey carries provisions enough for several privates, though in this instance a sufficient supply of food was the more needful, inasmuch as the walled towns and villages along the Prince's line of march thought it *quite necessary* to close their gates most carefully against his troops. They marched in succession by the small towns of Muchaha, Mayena, and the defensible place of Fort Gorowsky, the seat of a robber-tribe, who were prepared to defend their keep, if necessary. We came upon several lines of 'kanats,' and saw the results of these means of irrigation, in most luxuriant plots of melons near the village of Baba.* These were *without* the walls, and were consequently soon disposed of by the thirsty soldiers.

March of the Persian troops.

* Vol. ii. (pp. 608, 609) of 'Expedition to the Euphrates and Tigris,' gives a facsimile as well as the presumed translations of these inscriptions, with a fuller account of this fire-temple.

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Dowlat-Abad.

Towards sunset, we diverged a little from the line of march, and arrived at Dowlat-Abad, a place of some strength, where we were steadily refused admittance lest we should be followed by the troops; and we were obliged to lie down, supperless, outside the gate, and during the sound sleep which followed on our long ride, my sword was taken from beneath my pillow.

Jemshid ruins.

Leaving Dowlat-Abad next morning, we passed a line of 'kanáts,' which seem to have terminated at the ancient city of Jemshid. Its remains are extensive, and comprise a mound of considerable size, which may have been the citadel. It appears to have been circular, and built of unburnt bricks of very large size. Ruins of towers, walls, and fragments of glass and pottery, scattered for some distance around, mark this as the site of a once extensive city. We were now in the Plain of

Sowa plain, &c.

Sowa, and a clay-built village of this name, remarkable for dome-shaped roofs, such as are common in Egypt, stands near the ruined mound. Here also we again observed the line of 'kanáts,' which is kept open by baked earthen rings, placed at short intervals from one another along the channel. A little beyond Sowa we

Ruins of Nowok-Koh.

saw the extensive ruins of Nowok-Koh, and the Mountain of Salt, and passed in succession the villages of Dungy, Seggabet, Zeabet, and Singala. This last was our restingplace for the night. It is a large mud-

Singala.

built village, situated on the slope of a conical hill, and watered by an abundant stream. The country around it is extremely fertile, proofs of which everywhere met our eye, in piles of neatly-cut stored-up grain.

Ruins of Sultanea

Four farsangs through a hilly country brought us next day to the extensive remains of Sultanea, comprising

several mosques, one of which is still a fine building. Disappointed in finding quarters in this once handsome city, we skirted a little swelling hill, ornamented by a kiosk belonging to the Shah, and in the afternoon saw the walls and towers of Zingana rising before us. This town was to have been our halting-place for the night; but, even at this distance of time, I cannot recall without a shudder the melancholy picture which it presented. The people were flying from the plague, while numerous freshly-made graves, and a homeless population, warned us to resume our journey without delay.

Zingana.

We hastened onwards to the village of Zingayra, which was still free from this dreaded disease; and during the next evening, after traversing a hilly country intersected with ravines, and passing the kiosk of Abbas Mirza, we reached the Plain of Achmedia, where we were welcomed with Indian hospitality by the British Envoy and Mrs. Campbell, whom we found encamped on this spot, in consequence of the spread of plague in Tabriz. The interest evinced by Captain Campbell,* and his assistant, Mr. McNeill,† and various guests, in my projected Euphrates navigation, was warmly appreciated by me; and I remained with them for some weeks, planning the best means of furthering my enterprise in England, as well as in India. Our occupations were temporarily interrupted by a summons from Abbas Mirza to Captain Campbell, to confer with him on the subject of the Poles. But before he reached the capital, the

Zingayra.

Kiosk of Abbas Mirza.

Camp of Achmedia and the Envoy's party.

* Now Sir John Nicholl Robert Campbell, Bart., K.C.H.

† Now the Right Hon. Sir John McNeill, G.C.B.

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success of the Russians had put an end to the hopes entertained by both Poles and Persians, and the Envoy returned to us at once.

Question of the route to India.

The great importance of opening a line of communication with India by the Euphrates, had been already submitted, privately as well as publicly, by the Envoy and Mr. McNeill, not only to the authorities in India, but also to the East India Company and the Board of Control. Our knowledge, however, of some parts of the line to be traversed was at that time still very imperfect, and it was therefore considered desirable that I should make an examination of the Upper Euphrates, and of a portion of the countries on each side of the river, on my way home. For this purpose, I made arrangements at once to go to Trebizonde, and thence to cross Asia Minor to the Upper Euphrates and the shores of the Mediterranean. In doing this, I also proposed to myself, though as a secondary object of interest, to follow the march of the Ten Thousand.

Proposed examination of the Upper Euphrates.

Tabriz to Khoi.

Everything being ready by December 12, I exchanged the warm hospitality of the Envoy for the bitter cold of the upland of Tabriz, and the next morning reached Khoi, where I was delayed for horses. This place is mentioned in connection with a mission from Henri III. of France to Tamerlane, in 1603. It is still of some consequence, and boasts of a castle and the usual crenelated walls, flanked by round towers, surrounded by a shallow ditch and an imperfect glacis. It has mosques and bazaars, with a population of 10,000 souls.

A ride through deep snow brought us to the

considerable village of Ali-Sheikh, on the banks of the Ach-chi. Its houses are low, flat-roofed, and are supplied with piles of horse-dung for fuel. The Persians being good cooks, our supper was excellent, and would have been much enjoyed under other circumstances; but a crowd of curious gazers did not leave us room to sit, much less to enjoy our meal.

Ali-Sheikh and Ach-chi river.

Having forded the Ach-chi the next morning, three hours' ride brought us to the wild and lengthened pass of Turconchy, and in seven hours more we reached the stone-built village of Taylea, near which there are springs of tepid water. Our route onwards lay through the village of Killysoy to the entrance of a deep valley, beyond which Mount Ararat appeared, with the town of Bayazid, hanging, as it were, suspended from the mountain-side nearly on a level with ourselves. The scene increased in beauty as we approached the mountain, and saw the town more distinctly, stretching upwards to a castellated work, which occupies the summit of the steep and craggy shoulder at the base of Ararat. Bayazid is defended by a strong loopholed wall, flanked by square towers. It contains a mixed population of Armenians, Greeks, and Turks—three mosques, two Christian churches, and a monastery.

Pass of Turconchy.

Ararat and Bayazid.

Population and descent.

But the most striking object is the serai of the Dereh Bei, who is a hereditary chieftain and Pacha of 'two tails,' which is remarkable not only from its position, but also from its singularly massive parapet-wall, rising from the very edge of the craggy eminence from which it commands the town. Bayazid is the last Turkish town short of the Russian limits.

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Great and Little Ararat.

Moving, as we were now doing, along an ascending valley, the great mountain, of which the elevation had hitherto been comparatively lost, appeared higher and higher as we proceeded: gradually the bluff outline of Little Ararat came in sight, and when we reached the summit of the pass near Diadin, Ararat itself rose before us, towering with matchless grandeur. Ac-

Elevation, &c.

cording to Dr. Parrot, who visited Ararat in 1829, its height is 16,254 feet, and the second peak 12,284 feet—the former being thus more than 1,000 feet higher than Mont Blanc.* The basaltic rocks around

Diadin.

the strong castle of Diadin, and the serai of the Dereh Bei, give some interest to the place. The houses are of stone, and have a pile of fodder and dung, for fuel, on each of their flat roofs. The dress of the men was a mixture of Turkish and Persian costume—some wearing the indispensable fez of the former, others the high-pointed sheepskin caps of the latter.

Our ride onwards by Ulad Kelessa, and across the Murad Sū to Maksonda, was rendered most interesting by the grandeur and constantly varying aspect of Mount

View of Ararat.

Ararat. Its lofty peak, backed by a clear blue sky, stood out in perfect distinctness, and three shoulders were also visible, which seemed to terminate, in a moderate slope, westward towards the plain. We passed the night in some subterranean dwellings, the

Visit the Dereh Bei of Maksonda.

residence of the Dereh Bei, Muhammed, being the only stone-built house in the place, consisting of a large apartment with three divisions in it, and a stable adjoining. He received us with much hospitality,

* General Monteith: 'Height of Ararat,' vol. iii. of 'Royal Geographical Society's Journal.'

and was handsomely dressed, with a good deal of gold lace about him, and the loose red cap of the Kurds hanging behind the head. Coffee and pilau were served, and I made some tea, which the Bei tasted for the first time in his life.

Taking leave of our host after coffee the next morning, a dreary day's ride of nine hours brought us to Toprah Kaleh, a defensible building of some strength, attached to a considerable village of the same name, of which we saw nothing, as it was completely buried in snow. We were, however, kindly welcomed, and a good supper prepared for us in one of these buried dwellings, but where we had to undergo the trial of most intense suffocating heat, caused by a crowd of wandering Kurds. Our route now lay by Abougist Castle and the village of Taher to Delli Baba, where the dwelling-places are imbedded in the side of the hill, and for the sake of warmth, during the severe winters of Armenia, each house is provided with an oven, which divides it into two small apartments, both well heated.

Toprah Kaleh.

Delli Baba and its dwellings.

The only light admitted is by a small pane of glass over the door. There was but little worth relating in each day's journey as we proceeded, crossing the Aras by a bridge of seven pointed arches between high buttresses, and advancing through a well-cultivated plain to Hasan Kal'ah, which was an important place in the time of the Genoese Republic. It has now fallen to decay. The remaining houses are of stone, with flat roofs of earth, supported by logs of timber brought from the forests around Kars. It is chiefly remarkable for its hot springs, some of which are bituminous,

Aras river.

Hasan Kal'ah.

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Natural hot springs.

while others contain iron and lime. Their greatest heat is 105° Fahrenheit. In one spot, resembling a crater, the water rushes up in such a copious stream, that its basin is constantly well filled, and forms a deep and spacious natural bath, much frequented by bathers, and used by both sexes alternately. The Pacha kindly arranged that I should have it to myself for a time, and I luxuriated in a most enjoyable swim, which caused the fatigue of my long journey, through deep snow, to become quite a thing of the past.

Hasan Kal'ah to Erzerum.

Our progress to Erzerum was slow, on account of the depth of the snow; and when at length we entered the capital of Armenia, the buildings on either side were scarcely to be distinguished, so completely were they buried in its soft white folds. Here ended the second stage of my journey (of 405 miles from Tabriz to Erzerum), through Persia and Armenia, from Bushire and the estuary of the Orontes.

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ERZERUM TO TREBIZONDE, AND FROM THENCE TO THE MEDITERRANEAN COAST THROUGH ASIA MINOR.

Consul Zohrab's hospitality, and his local knowledge, greatly facilitated my enquiries respecting Erzerum * and its vicinity. It is situated nearly in the centre of a very elevated table-land,† between the Karâ Su, or western arm, and the Murad Su, or western branch of the Euphrates, which are only 19 miles apart.‡ It is the seat of the government of the Vizier Azēm, or Governor of Asiatic Turkey, who, although lately deprived of the dependencies of Kars and Ackaltzek, holds the third place in the Sultan's Empire,—Egypt and Bagdad being the first and second.

Position, &c. of Erzerum.

Erzerum is feebly defended by a line of walls flanked by towers, and a castellated work in the centre of the city. Its principal buildings are a Greek and Armenian church, and thirty-six mosques, one of which is of Persian architecture, and is remarkable for its light arabesque tracery. The khans are numerous, and the bazaars very extensive, and supply wool, leather, cutlery, Damascus sword-blades, and other objects of trade. Erzerum, however, now possesses but the shadow of its

Churches and Mosques.

Trade.

* Once De Garen, ancient Theodoiopolis, Moses Chorene, Hist. lib. iii. cap. 4.

† According to Consul Brant ('Royal Geographical Society's Journal,' vol. vi. p. 200), this plain is 5,500 feet above the level of the sea. But Mr. Walpole's calculation gives it an elevation of 7,000 feet.

‡ Ibid. Note, p. 210.

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former prosperous commerce. On the entrance of the Russians into the city, in 1831, the Turkish inhabitants fled; and Paskiewitch subsequently caused the greater part of the Armenian families to remove within the Russian territory, which necessarily almost completed the ruin of the place, by reducing the population from 130,000 to about 15,000.*

Khapoona village.

I left Erzerum on December 26, crossed the Karà Sú, and halted for the night at the extensive village of Khapoona. Every corner of this place was occupied by a passing caravan, and it seemed as if shelter—which in the midst of an Armenian winter is almost a question of life and death—would be out of the question. At length I obtained a small space between a stable and a cowhouse, where I passed the night most comfortably. Passing over the Murad Chaï, we reached the gold-mines of Kabán Maden, and halted at Baïbūt, which is a place of some importance, in consequence of its proximity to the mines of Aghana Maden, which produce gold and silver as well as copper. The population are chiefly miners. Tradition carries the existence of this place back to the time of Alexander, under the ancient name of Hisparatus, and its mines are mentioned by Strabo.†

Murad Chaï and Baïbūt.

Aghana Maden.

Argin.

A deep and narrow valley leads the travellers from Baïbūt to the village of Argin, situated at the foot of a very steep ascent. This valley gradually opens out, and becomes clothed, first with juniper, then with pine-trees, while villages of stone-built flat-roofed

* Consul Brant, 'Royal Geographical Society's Journal,' vol. x. pt. 2, p. 231.

† Malte Brun, 'Géographie,' vol. viii. p. 157.

houses and castles appear at intervals on the hillside. As we advanced towards Ghūmish Khaneh, vegetation became more luxuriant. Elms, alders, and other forest trees were interspersed with juniper and pine along the western side of the valley, whilst on the right the hills were bare and rugged. Ghūmish Khaneh, or the 'Fountain of Silver,' consists of an upper and lower town, occupying a bend of this wild and rocky valley, which is watered by the River Kharshish. It consists of some 2,000 Turkish and 600 Greek or Armenian dwellings, built up the steep slopes of the hills on each side of the river, having slanting roofs covered with shingles. Iron and copper are still smelted by the people, and this half-neglected district also produces lead, silver, and some gold. The valley, which is already narrow at this spot, becomes more and more so as the traveller proceeds onwards, until there is scarcely room for a narrow passage beside the river, and he feels that his safety depends on the retaining-wall, which alone secures him a precarious footing. This dangerous spot is about three-and-a-half hours' ride from the mines, which are reached by crossing the valley by a very high bridge. Beyond this point the valley widens out, and barberry and thorn, as well as juniper and pines, are plentiful along its left side. We halted at the village of Tekeh for the night, but could get no better accommodation than a crowded stable, where, in spite of the confusion of settling loads, and the noise of currycombs, we managed to sleep soundly. The steep ascent which awaited us beyond this place could only be accomplished with safety by daylight.

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Scenery about Ghūmish Khaneh.

Mineral productions.

Tekeh village.

The 10,000 Greeks must have followed this valley as

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The mountain pass, and march of the Greeks.

far as Ghūmish Khaneh, and must there have found themselves most unexpectedly cut off from the sea by the intervening lofty range of mountains. They must therefore have continued their march along this valley and that of Godol, lying to the south-west, until they had an opportunity of obtaining such intelligence as led to their partly retracing their steps in order to reach the sea. Taking a guide from what had been their diverging point, I passed through the small town of Yenisher to the foot of the great mountain barrier now rising before me. An ascent of two hours, through pines, rhododendrons, and brushwood, brought me to the village of Zingani, from whence, in two hours more, we reached the summit of the pass, which, according to Consul Brant, is 4,580 feet above the plain.*

Beautiful scenery.

The descent, especially through the forest, was more difficult than the ascent; but the scenery was romantic and beautiful, reminding me of the Alps in grandeur, and luxuriantly wooded with beech, pine, and the silver-poplar. This was succeeded by a winding descent over undulating shoulders of the range, with shingle-roofed houses at intervals, reminding me of similar buildings and scenery in the Balkan Mountains.

Yeni Kupri.

We passed the village of Yeni Kupri, situated amidst magnificent pines and gigantic rhododendrons, and crossed to the right side of the valley, which had now again become very narrow, and was quite closed in by mountain-ash and beech-trees of extraordinary size. Midway along this valley, we passed the remarkably Swiss-looking village of Ockley Khaneh, and stopped for the night at a kind of shop, resuming our journey early

Ockley Khaneh

* 'Royal Geographical Society's Journal,' vol. vi. pt. 2.

on the following morning (December 31). We passed the two villages of Hamouri, and rode on through a well-wooded country to Geveslik, opposite to which, on the other side of the valley, we saw the serai of Aib Oglū Osman-Agha, an ancient-looking building, with a high-pitched projecting roof, massive white walls and verandahs, and two square towers, as means of defence. As we advanced, we passed the conspicuous castle of Kusk Oglū, a brother of the famous Dereh Bei; and going alternately north-east and north-west, through woods of noble beech and pine, we caught sight of the sea from some of the windings of the valley, and came upon a view of the castle and city of Trebizonde, with the Black Sea beyond; and thus the last evening of 1831 was happily spent, under the hospitable roof of Her Britannic Majesty's Consul, Mr. Brant.

and scenery onward.

Trebizonde occupies the lowermost slope of the lofty and almost unbroken mountain-chain, which reaches from the shores of the Caspian to those of the Black Sea, where its rich and picturesque scenery form the background of the city itself. It seems to have been first mentioned in history as a Milesian settlement, and to have been connected with the early Asiatic trade through Rai, Balkh, &c. At a later period Trebizonde is mentioned by Herodotus, and it was one of the cities taken by Xerxes 430 B.C.* We know also that it was sufficiently rich and extensive to entertain Xenophon's followers for 30 days, during which the gymnic games were celebrated.† It attained its greatest importance during the Lower Empire, when it became a royal seat.

Position of Trebizonde.

Its early history.

* Lib. v. cap. vi.

† 'Anabasis,' lib. iv. cap. 8.

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The town covers an elevated tongue of land, at the inner extremity of which is the citadel. A line of works is carried from the end of the point, round the plateau, to its other extremity, thus enclosing the space once occupied by the original city, which formed a parallelogram of 800 yards from SE. to NW., and 200 yards across. The present buildings enclose part of the ancient site at their western extremity, from whence they extend, in a square form, almost to the edge of the Black Sea, being 900 yards in length by 800 in width. The modern houses occupy a lower level than those in the older enclosure. Some of the latter, and the remains of the mole and basin, appear to have been the work of the Genoese. The destruction of these works has left the commerce of Trebizonde dependent on its safe anchorage, which is, happily, remarkably secure: for, owing to the bold mountains near the town, the wind reverberates, and as, consequently, it cannot blow home, the anchorage is comparatively safe, even when there is a gale from seaward.

Ancient site of Trebizonde.

In 1832 the population numbered about 30,000 souls, including 2,000 Armenians and 4,000 Greeks. The streets are planted with trees, and the houses, being low and flat-roofed, are nearly hidden by their foliage, but the mosques and churches are very conspicuous. Nineteen of the latter still remain, but they were formerly much more numerous; many have now been converted into mosques, one of which (Santa Sophia) is a circular and striking building. The cereal and mineral productions of the surrounding country having been well-managed lately, there has been considerable increase in the trade and commerce of the place

Its population.

Commerce of the city.

(from 5,000 bales in 1830 to 20,000 in 1832), and several of the old Genoese castles have been converted into store-depôts in consequence.*

After a fortnight, spent most agreeably and profitably with Mr. Brant, I prepared for my somewhat serious journey to explore the Upper Euphrates. I engaged three baggage-mules and two horses, and left Trebizonde on January 14, 1832, and entered the wild mountains, which have been so graphically described by the Father of (especially) Military History.

Leave Trebizonde.

Retracing my route as far as Ghūmish Khaneh, we halted at the Castle of Godol, which is a very remarkable building, occupying the crests of two pinnacles of massive rock, between which there is a third portion of the castellated work, so judiciously placed at the intersection of a cross-valley as to facilitate and protect the commerce of the Genoese. Leaving Godol, we passed through a wooded country, with occasional hamlets and mills, and the large village of Damende. Towards evening we came upon Byané-Kaleh, another Genoese post, where we halted, and visited the mineral springs near the castle. The valley is here closely shut in by wild precipitous hills, and at once recalled to my mind Xenophon's graphic description of this portion of the retreat:—indeed, every step now identified his well-known localities, and proved the faithfulness of his descriptions of those natural features on which time has made but little change.

Godol Castle.

Byané-Kaleh and the Greeks.

The sea is visible from three lofty mountains in this vicinity—from that of Zingana, from the higher

* Consul Brant's Report, 'Royal Geographical Society's Journal,' vol. vi. p. 191.

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Karagool, and from the Gaiur Tagh, or 'Infidel Mountain.' I waded through deep snow to the summit of the 'holy Mountain of Theches,' and on reaching it, I felt inclined to exclaim, with Xenophon's patient followers, 'The sea!—The sea!'* I came to the conclusion that this was the very spot where all their anxieties and uncertainties had been brought to a close by the sight of the sea at a short distance from them. They had now, their position being ascertained, only to descend from a height of some 5,000 feet, and then to continue their march, as they appear to have done, for some eleven or twelve miles along the Valley of Damajala, where two rivers and four valleys meet.

Gaiur Tagh and the sea visible.

Here the enemy was prepared to dispute the passage. The Macronians were posted behind steep banks rising from the farther side of a deep valley, which was so narrow that the armies were within speaking distance. Xenophon at once entered into *vivâ-voce* negotiations with the enemy, from the opposite side of the valley, which terminated favourably; and the Greeks proceeded peaceably towards the Pass of Zingani, which, as I have already described, had caused them to make their long divergent march. Their arrival at this spot was, however, now attended with a different result; for although the Colchians occupied the side of a steep mountain rising to about 5,000 feet above the sea, Xenophon's military talents enabled him to overcome every difficulty. Perceiving that a direct attack could not but fail, he divided his army into eleven columns, which were to ascend the mountain at

Defensive position of the Macronians.

Position of the Colchians turned

* Anabasis, lib. iv. cap. 7.

certain distances from each other, and thus not only outflank the Colchians, but at the same time attack them in rear. This movement was eminently successful: the Colchians fled, the route was left open, the mountain quietly passed, and in three days Xenophon and his daring followers had reached their destined port, and were preparing for their ulterior operations.*

Alum-mines.

It is useless to delay the reader by a journal of my daily progress—now ascending and descending mountain slopes, now zigzagging along their sides, but without meeting with any objects of special interest, excepting the alum-mines of Shap Ma'dan, which give employment to about 70 Greek and Armenian families. Crossing the Kara-Hisár, I reached the picturesque town of the same name, built on a conical rocky hill about 800 feet above the plain, and defended by a Genoese castle, the keep and hexagonal flanking-towers of which are still in good repair, and enclose two masses of rock. The hill is almost impregnable, and the town is protected as well as commanded by its castle. It consists of the usual flat-roofed houses, and contains a population of about 2,000 Armenian families. The neighbouring mines of Sheb-Khaneh make this a place of some importance.

Kara Hisár.

Beyond Kara-Hisár I passed the villages of Gūmbat and Guzellan, and that of Kenk, said to be in the neighbourhood of some remarkable ruins, which on inspection dwindled down to a few ancient tombstones. As we approached this village in the dark, our steps were guided by the flickering of many lights, and the

* A fuller account of the movements of the Greeks will be found at pp. 203–243, vol. ii. of 'Expedition to Euphrates and Tigris.'

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sounds of merrymaking, proceeding from a group of men and boys, who were dancing round a fire, lighted on the outskirts of the village in honour of a wedding.

Proceed along the Kizil-Irmak.

Following the course of the Kizil-Irmak, the mountains gradually receded, as we passed in succession through the villages of Jerryoon, Yarasson, Yene, and Koch-asor, the latter a square-built village at the foot of a rocky hill, and close to the river. Farther on, and still near the Kizil-Irmak, we passed the ruins of an ancient church and convent, where a warm spring bubbles out of the rock, and a little later saw the remains of an Armenian church.

Guydoo.

I had ridden for nine hours on this day, exposed to the keenest cold, and supper and the shelter of a warm house at the village of Guydoo were therefore more than usually welcome. My attention was attracted by a flight of wild ducks near the village, and on going out with my gun, I ascertained that they resorted to this spot on account of a warm spring, which rushes out of the ground in sufficient volume to form quite a stream as it enters the Kizil-Irmak. The ducks were luxuriating in this tepid water, and though disturbed by my presence, they continued circling round and round this attractive spot, until, satiated with sport, I left them and resumed my journey, and we reached Sivás the same afternoon. The central position of this place creates a most active trade—in silk, cotton, wool, grain, &c.: the bazaars present such a lively bustling scene, as might be expected in a focus of various lines of commerce, which would be greatly augmented by the extension of these lines to India.

A warm spring.

Sivás.

Sivas (or Suas)* occupies the banks of the principal

* Once Cahira, and afterwards Sevastia. (Pliny, lib. vi. cap. 4.)

affluent of the Kizil-Imak, and the city stands almost in the centre of the extensive plain, which stretches for some distance to the ENE. and WNW. of this part of ancient Cappadocia. It contains two castles, built on a hill within its precincts and 3,000 Turkish and 1,000 Armenian houses—which are by no means all of the general flat-roofed construction, but intermingled with pent-roofed dwellings and numerous small gardens, khans, baths, and mosques. There are nearly a hundred of the latter, many of them very handsome buildings, in the best style of Arabian and Persian architecture, and the minarehs attached to some of them are remarkably light and elegant.

Leaving Sivas, we crossed the Kizil-Irmak by a bridge of seventeen arches, and passed through a level and cultivated country, dotted with villages at short distances apart, to our halting-place at Hanna, an inconsiderable Turkish village. Our attention was attracted by numbers of small mounds surrounding the village, which we found to be heaps of grain thatched with straw and covered with earth, as a protection against the severe cold of this climate. At our next stopping-place (Karagoon), we found these grain and fodder stores heaped on the roofs of the houses.

Hanna village.

From Karagoon we proceeded to Pallas, a little place containing about ninety families, whom we found in a very excited state, quite unlike the usual placid demeanour of a Turkish community, which was accounted for by the rejoicings attendant on a wedding. Old and young had turned out for the festivities; the latter were dancing, or rather *walking*, round a pole—one of the party carrying a large triangular flag,

Rejoicings for a wedding.

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and beating an immense drum to keep the children in time. The rest of the merrymakers consisted partly of women, who escaped hurriedly on our appearance, leaving their husbands to receive us, which they did with much friendliness.

Next day, our course lay at one time along the border of an extensive lake, at another through a wild basaltic tract, with an occasional village, succeeded by several small towns—harbingers of the great city we were now approaching, and which came in sight at the base of the mountain, as we rounded the gigantic Agrish Tagh. I had looked forward with much interest to a visit to Kaïsariyeh. Its position in the centre of Asiatic Turkey, and its prominence in past history, had given it great importance in my anticipations, which were, however, in one respect grievously disappointed, since Kaïsariyeh, which at the height of its grandeur contained a population of 400,000 inhabitants, is now reduced to some 6,000 Turkish, 1,400 Armenian, and 600 Greek houses, one-fourth of which are tenantless. It occupies part of the plain to the south-west of the great mountain, and contains an extensive castle, several fine mosques and bazaars, but all showing symptoms of decay. Some ruins, to the eastward of the city, mark the site of Cæsarea,* once Mazaca or Mosoch.† The lofty mountain adjoining this locality has a prominent place in the account of the march of the Assyrian forces from Nineveh to Jerusalem, so graphically brought before us in the apocryphal Book of Judith.‡

Kaïsariyeh and population.

* Strabo, lib. xii. p. 538.
† Josephus, book i. cap. 6.
‡ Judith, ii. 11, 17.

The remains near Kaïsariyeh are chiefly sepulchral, belonging to the time of the Romans. Some miles from the town a column marks the spot where the great battle took place between the Romans and the Persian monarch Shapur; while other remains enable us to determine the site of the ancient capital of the territory, the name of which was changed by Tiberius from Cæsarea to Mazaca, as a punishment to the people for throwing down the statue of Jupiter Apollo.

From Kaïsariyeh we retraced our route as far as Pallas. Thence, four days' riding in a south-westerly direction, through cultivated valleys and numerous villages, brought us to the foot of the Great Taurus range, ascending which we reached the mountain-town of Gurūn, which occupies a singular position. A castle, now in ruins, stands in the centre of the town, commanding a view of the fertile valley below, which extends both eastward and westward. There are also the remains of what appears to have been an amphitheatre, partially covering a conical hill which has an elevation of about 150 feet. The town consists of 2,000 houses, built round these two prominent objects, and its importance is chiefly due to its position at the intersection of various routes leading to and from the shores of the Mediterranean.

Pallas.

Gurūn.

I had some difficulty in inducing my *catergee* (muleteer) to continue the journey beyond this point; but having overcome his reluctance to proceed, we descended from Gurūn to the Gurūn Sū, taking a south-westerly direction, and passing through a basaltic tract of country to the Ova-el-Bostan. This is a fertile tract, extending from 15 to 18 miles NE. and

El-Bostan.

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SW., and again from 10 to 13 miles SE. by NW.—supporting several villages, some of them of considerable size. At the extremity of this plain we entered the town of El-Bostan, which stands partly on the plain, partly on the slope of the mountain by which it is bounded, and is washed by the Jahet Sū, which is celebrated for the abundance of fish found in its waters. El-Bostan possesses one large mosque, having a cupola covered with copper, and five smaller ones, each with a wooden minareh. The houses are of clay, with flat roofs, and open fronts of light and graceful architecture. We found but few ancient remains, some of which were inscribed with Cufic characters, and were surprised to see some gulls sailing over the plain, though so distant from the sea.

Another day's journey brought us to the village and pass of Casterman, nearly at the summit of this part of the Taurus, whence descending in a south-westerly direction along a rocky valley, we reached our intended restingplace, the village of Jellagé. Here we met with a most inhospitable reception, and things looked so unpleasant that we had to resort to defensive preparations, after closing our door as securely as we could. We managed to get off safely the next morning, notwithstanding a great manifestation of hostile feeling from the inhabitants of this Kurdish hamlet, and rode on through stunted oaks and cedars, and strikingly wild scenery, until we reached the crest of this part of the Taurus range, which rises to about 1,800 feet. Thence a succession of deep valleys brought us to the base of the Zeitoun range, which has an elevation of 8,000 feet;

Jellagé village.

and continuing on for some little time along a hog's-back, we descended the mountain, by a zigzag course, through richly-wooded and very beautiful scenery, reaching Ali-Shehr in the afternoon.

Here we were received by the lord of the valley in his castellated dwelling, though with very doubtful hospitality. We found him reposing under his spacious verandah, and this being the Mohammedan fast the Bei, Hajji Ismael Agha indulged his appetite two or three times during the evening, by way of preparation for the next day's abstinence. But our fare was less abundant, and seemed to have reference to remuneration rather than to hospitality, which necessarily lessened our inclination to be liberal. On leaving the next day, the Bei supplied us with an escort to ensure our safety, and we followed the course of the Jeihan Sū, here quite a fine river—retracing part of the previous day's journey, and ascending the mountain through woods of pines, oaks, cedars, and wild vines. On rounding a projecting shoulder of the mountain, we entered a narrow rocky pass, where we most inopportunely encountered a caravan of laden mules and horses, which we did not get through without serious difficulty. A steep valley succeeded—then a plain from which we ascended to the town of Marash, which occupies three remarkable projecting shoulders, about halfway up the slope of the lofty Aghr-Tagh. On the centre shoulder stands the castle, while the town is built on the other two as well as in the intervening valleys, which are connected by bridges. There are twenty-five mosques, and about 3,500 clay-built houses in the town, which overlooks a rich plain, 36 miles long by 10 wide, producing fine

Jeihan Sū.

Marash and its mines.

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tobacco, abundant grain-crops, and a large supply of timber. There are extensive mines of iron of most excellent quality in the neighbourhood, some of plumbago* also, and—what is more rare—one of native steel.

Aïntab.

From Marash we proceeded to Aïntab, passing through a pastoral tract of country occupied by the black tents of the Kurds. The Castle of Aïntab stands in a commanding position, on the summit of a round elevated hill, at the base of which lies the town, which is well-built, and has several fine mosques, baths, and about 8,000 Turkish and 500 Armenian houses, almost all of stone. A calico manufactory exists here, and its communication with Aleppo, Orfah, and Marash, renders Aïntab a place of considerable commercial importance.

Aleppo and route to Bir.

Aleppo was my next destination, whence I hoped to reach the Euphrates near Beles. But the dread of the Arabs made it almost impossible to procure guides and animals to go thither, and I was reluctantly obliged to take the route of Bir. This, as the caravan line to Upper Mesopotamia, is better known than that by Beles; and while engaging my horses, and making my preparations, I was so fortunate as to fall in with Monsieur Vincint Germain, an Aleppine, then employed as assistant-engineer by the French Consul. This gentleman had—partly from information obtained from others, partly from his own local knowledge—laid down a map of the country between Aleppo and the sea, and also for some distance to the east of the city. Finding his

Vincint Germain.

* We obtained a considerable supply of this material when putting together the 'Euphrates' and 'Tigris' steamers, in 1836.

Lieut. Eden, R. N. del. G. Hawkins, lith.

Day & Haghe Lith.rs to the Queen.

[illegible]

acquaintance with the features of the country likely to be of service to my immediate and future objects, I made a contingent arrangement for his employment, in case the proposed route through Northern Syria should eventually be carried out.

Mr. Langton joins.

I devoted a good deal of attention to the commerce and advantages of Aleppo, and left it on February 26, accompanied by the late Mr. Richard Langton, who was anxious to extend his travels towards Orfah and the Upper Euphrates. Three days' journey by the River Sajour brought us to the castellated work from which the name of Rūm Kaleh is derived, which occupies the summit of an elevated limestone hill, overhanging the banks of the river. This hill is again washed, on its southern side, by a copious affluent of the main stream coming from the west, which in the latter part of its course flows through a rocky valley. In the angle thus formed stands the little town of Rūm Kaleh, consisting of about 900 poor houses; but the command of this passage into Mesopotamia gives considerable importance to this place and its castle.

Rūm Kaleh.

Resuming our journey near the left side of the river, which was still deep and broad, we passed successively the villages of Kafr-Beg, Karamizo, and Argur. Near the latter, which stands on a low round hill, are an artificial mound, and many scattered remains of sculptures, among which there were two large sarcophagi, despoiled of their lids, but having a portion of stone left at the extremity, to serve as a pillow for the head. In this immediate vicinity were three cisterns hewn out of the rock, and we found many other proofs that we stood on the site of an ancient city—possibly that of the

Remains, possibly of Anthemusia.

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Excavated tombs near Anthemusia.

Anthemusia of Pliny.* We examined several most interesting rock sepulchres; they were destitute of human remains, but were otherwise quite perfect. Fig. 1 gives an outline of the ground-plan of one of these structures, which has the form of a cross. Fig. 2 is a section along the dotted line, C D of fig. 1, giving an elevation of this portion of the sepulchre. Again, fig. 3 is

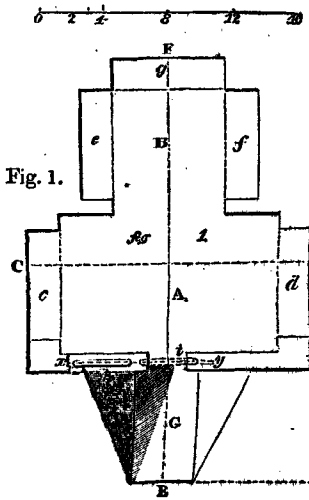

Fig. 1.

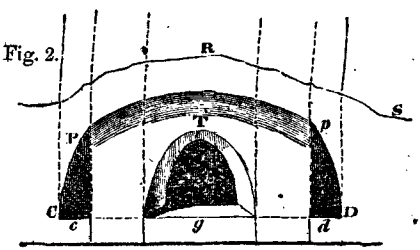

Fig. 2.

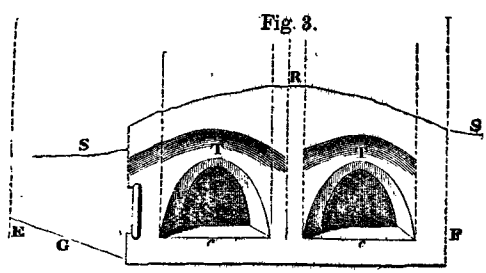

Fig. 3.

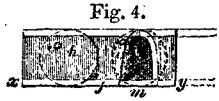

Fig. 4.

an elevation of the two recesses for bodies, corresponding to the dotted line E F. Fig. 4 represents the exterior part of the entrance, which is hewn out of the

* Lib. v. cap. 24.

solid rock,* and a circular stone is made to roll up and down from the doorway between two grooves, and is thus moved from its position at C, to that of the dotted line above M, where, by means of a chain, it is secured to the rock. Rolling stones.

The lateness of the hour, and the distance to our proposed halting-place, prevented any more minute examination either of these or of some other remains, which we met with on our way to Samsat, or Sameisat, which we were anxious to see. With daylight, however, we found only a square and lofty mound, with some scattered fragments of columns and other portions of buildings remaining—the sole ruins of this once important place. Its site is a remarkable one, for the Euphrates here makes that great bend which is specially noticed by Pliny.† From this point we changed the direction of our route, and, leaving the river, passed through the two considerable villages of Ordel, and crossing some grassy downs we reached Orfah. On to Samsat. Bend at Samsat.

To this place I had looked forward with much interest. Its history as a royal city, its much earlier connection with Job and Abraham, and its present as well as future importance with regard to trade (of which its position has at all times made it an emporium), naturally gave it great consequence in my eyes. Its appearance, as the traveller approaches, is most picturesque. It occupies the intervening valley, as well as the slopes of two hills, which jut out from the range of neighbouring mountains. On their southern side is the castle, which, as well as the town itself, is defended by high walls flanked by square towers. The Orfah.

* St. Matthew, xxvii. 60; St. Mark, xv. 46.

† Lib. v. cap. 24.

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city contains 900 Turkish, 800 Armenian, and 200 Syrian houses, all well-built—also numerous baths, and about twenty mosques, one of which is a remarkably handsome building, with two large ponds attached to it full of sacred fish.

Riha or Edessa.

The extensive excavations in the vicinity of the town are supposed to be the remains of ancient Riha or Edessa, and on the adjoining hill are the scattered ruins of a building attributed to Nimrūd.

It had been our intention to proceed from Orfah to Jaber Castle, with a view to examine that part of the Euphrates; but so many difficulties were made by our people, and so much hostility evinced by the natives, that prudence obliged us to relinquish our intention,

Return to Aleppo.

and Mr. Langton and myself hastened back to Aleppo, hoping to find the means of resuming our examination of the river from thence. Fear of the Arabs, however, met us on all sides, and compelled us eventually to give up our project, and satisfy ourselves with such information as could be obtained at Aleppo. In the event of carrying out a route to India by the Euphrates, Aleppo would again become, as it was in olden times, the central point of communication with Europe, and, as a necessary consequence, its port became an object of especial consideration.

Bay of Antioch

The Bay of Antioch, as Napoleon's expected place of disembarkation on his contemplated expedition to India, was the first part of the coast to be examined; the Bay of Scanderoon was the second. To both of these points I gave particular attention, and also took into consideration the possibility of restoring the

and port of Seleucia.

ancient port of Seleucia; and then journeyed onwards

through Asia Minor, still accompanied by my late friend, Mr. Langton.

Return to Constantinople.

On my return to Constantinople, I found that Sir Robert Gordon had been succeeded by Sir Stratford Canning as ambassador to the Porte; and, happily for me, his interest in the proposed line to India equalled that of his predecessor, who had taken the first steps in its consideration; and the influence of both ambassadors was ably and warmly seconded at home by the late Right Hon. John Sullivan, whose exertions led eventually to the advocacy of the late King, and to the train of events to be narrated in the succeeding pages.

CHAPTER VIII.

PROGRESS OF THE STEAM QUESTION—INTERVIEW WITH HIS MAJESTY KING WILLIAM IV., REGARDING THE TWO PROPOSITIONS OF COMMUNICATION WITH INDIA—A COMMITTEE OF THE HOUSE OF COMMONS EXAMINES THE QUESTION, AND VOTES £20,000 FOR AN EXPERIMENT BY THE EUPHRATES.

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DURING the period occupied by the journeys and explorations in Asiatic Turkey, Syria, Arabia, and Persia, of which I have given some account in the preceding chapters—that is to say, during 1829-30-31 and 32—I had from time to time sent home reports to Government of the results of my observations, more especially as regarded the different lines of communication between England and India. I do not propose to lay these reports before the reader—enough has been said of the countries and people through which I passed during these investigations. But I refer to these reports, because to them may possibly be attributed the growing interest in the question of the Euphrates line to the East, of which I became more fully aware on my return home in 1832, and which eventuated in the appointment of the Steam Committee of the House of Commons, which met in June 1834 to consider the question of alternate lines of communication with India, through Egypt in the one case, and Arabia in the other. Still, although the actual necessity of one or both of these lines was very generally felt, the all-

Steam communication with India.

absorbing question of Parliamentary Reform would have made it almost impossible to secure public attention to such an undertaking at this period, had it not received the support of several influential advocates. My observations on the Egyptian and Arabian lines of route, and the map which I had laid down of the River Euphrates, on a scale of 2 inches to a mile, attracted the attention of the late Sir Augustus Fraser, as well as that of Sir Alexander Dickson, Deputy Adjutant-General Royal Artillery. They also came under the notice of the Earl of Munster and Lord Beresford, and, which was of more consequence, under that of Sir James Kempt, G.C.B., then Master-General of the Ordnance. Sir James did not confine himself to ordinary official forms, for, after giving the subject of the overland route his personal consideration, he thought it incumbent upon him, as a matter of duty, to bring the question of steam communication before the late King. Although this question was then quite in its infancy, the necessity as well as the practicability of more rapid communication with India at once attracted His Majesty's special attention, and that also of many influential individuals, amongst whom were the late Sir Robert Inglis, Lord Holland, Sir John Barrow, Sir John and Sir Pulteney Malcolm, General Sir Willoughby Gordon, Lord Hill, and Lord Palmerston. Early in 1833, I was induced by the late Mr. Peacock, of the India House, to print my memoir on the Euphrates route with its map, in order to make the subject more widely known, and it was privately circulated early in February of that year. This step gained several fresh advocates to the cause, one of

Advocates of the Euphrates line.

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the most valuable of whom was the late Right Hon. John Sullivan, who, in bringing the ripened judgment of a green old age to the consideration of the overland route, renewed the energies of his early life, when, after travelling through Asia Minor to Mesopotamia, he descended the river Tigris on a raft, supported on inflated skins, and having reached India in 1782, to fill a high civil appointment, he had ever since felt and evinced the greatest interest in the route through Arabia, which he regarded as one very important means of giving security to the line of the Indus. At a later period only, I learnt that Mr. Sullivan had not only been moving Lords Lansdowne, Palmerston, and Goderich on this subject, but privately, through Sir Herbert Taylor, had been again drawing the King's attention to the question, for which His Majesty had been already prepared by the Master-General of the Ordnance. I was, however, quite ignorant of this friendly advocacy, and it was therefore a surprise to me to receive the King's commands to attend at St. James's with the maps and papers relating to the Euphrates.

Summoned to attend the King.

This interview was a memorable one to me in many ways, and I trust that its results may yet bear fruit for our country. It took place on April 16, 1833, and I well remember that when on my way to the palace, I met my friend Sir William Knighton, who on hearing of the immediate object of my attendance, gave me a hint to be prepared to answer any questions which the King might put without hesitation. 'For,' added Sir William, 'he will at once seize upon the leading points, which you should make quite clear and very

prominent; and if you do this, His Majesty will never forget their bearings.'

On being admitted to the King's presence, I naturally left the great map and papers outside, but they were at once asked for. I was desired to open them. 'Let us begin,' said His Majesty, most graciously, 'by getting a general idea of the countries you visited;' and having opened his own atlas for this purpose, he went into all the details as well as the relative advantages of both the routes.

Relative advantages of the two routes.

Then tracing on the index map the two competing lines to Bombay, I begged His Majesty to observe that one of these lines follows the direct and natural course of the Euphrates and Persian Gulf—the shortest line, in fact, between London and Bombay—whereas the other, by following the Red Sea, diverges for a distance of 1,230 miles, viz., from the entrance of the Red Sea to that of the Persian Gulf; adding that the shorter distance to India was not the only advantage of the Arabian over the African route, since in the one case the wind and sea are right ahead for a distance of 2,014 miles during the monsoon, whereas they are abeam at the same season of the year when steaming towards the Euphrates. I had scarcely concluded these remarks when the King said, with much animation, 'I am a sailor, and these points are, in my opinion, quite conclusive.'

Movements of Russia.

His Majesty now alluded to the serious apprehension caused by the presence of the Russian fleet at Constantinople, as well as by the gradual advance of that Power towards the Indus, and the consequent necessity of strengthening Persia; adding, that as an additional

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security to our position it might be advisable to carry out my suggestion by adding a steam flotilla to the Bombay Marine.*

Towards the end of this interview the King enquired how I came to be employed, which being answered, I added that I had given up the maps as well as the whole of the information I had then collected to the Government. 'That is quite right,' observed His Majesty; adding, 'But how have you been received? and what interest have my Ministers taken in the question you have brought forward?' I replied that much interest about steam had been expressed by Lords Lansdowne and Ripon, as well as by Mr. Grant, but that the all-important question of a rapid communication with India did not advance.

How the question was viewed by Ministers.

His Majesty observed that people sometimes hesitate till the opportunity is lost, but that he would take care to urge the matter onwards; adding, that I was to make known to him from time to time, through Sir Herbert Taylor, what was doing, that he might give it furtherance if necessary.

He then assisted me in folding up the large maps, reiterating his approbation and interest in what had been done; and an interview of more than an hour terminated with the confident expectation on my part that the Royal support thus promised would be continued until the Overland Route should be fairly established.

Royal support.

Owing to its political bearings, it had been arranged that the steam question should come under the special consideration of some members of the Cabinet. It was

* 'Minutes of Evidence of the Select Committee, &c., on Steam Navigation to India,' p. 52.—July 14, 1834.

subsequently settled that Lord Lansdowne should bring the subject of overland communications with India before the Lords, and that Mr. Grant should do the same in the Commons; whilst occasional articles in the *Times*, *Standard*, and other papers, showed that the subject was attracting public attention, notwithstanding the serious and sometimes, it almost seemed, insuperable difficulties in its way, one of which was the aggressive power of Russia in the East.

Proposed vote of Parliament.

During this summer she had sent a fleet and army to Constantinople, and the startling fact that Turkey was *almost* in the power of the Czar naturally caused much uneasiness: so much so, indeed, that towards the close of 1833 it was generally believed that the Cabinet was occupied with the momentous consideration of what could and ought to be done by Great Britain to extricate the Sultan from his actual state of thraldom.

This untoward position of public affairs necessarily put the Euphrates enterprise aside for the moment—whilst I endeavoured to turn my local knowledge to some account by showing that we had ample means at command of forcing the Dardanelles, and of thus rescuing Turkey from her coming subjection to the Czar. In the early part of February, I submitted to Government, through Sir Robert Gordon, the project of a *coup-de-main* against the Dardanelles, which, as I afterwards learnt from Sir Herbert Taylor, was submitted to the King. A more passive course, however, appears to have been thought advisable.

Projected passage of the Dardanelles.

The question of opening a communication with India was resumed in the early part of 1834, under the auspices of Lords Lansdowne and Ripon, with the co-opera-

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tion of Mr. Grant, who had asked Lord Althorp, then Prime Minister, to provide the necessary funds for an experimental expedition. But a few days after this proposal had been made, I had the serious disappointment of learning, *privately*, that as the Cabinet was divided upon the Euphrates question, it would become necessary for the satisfaction of its supporters to appeal to Parliament. In consequence of this determination a Committee of the House of Commons met on June 9, with Mr. Grant as chairman, and a most influential body of members, many of whom had sought this opportunity of promoting an undertaking now so much desired by the public at large.*

Committee of the House of Commons on the Euphrates,

and proceedings.

The first examination was that of Mr. Peacock, who had already done much to prepare the way for steam-communication with India.

Mine followed; and I commenced by describing at some length the three principal routes to and from India, with many particulars bearing upon these in connection with that country.

The Committee went most carefully and fully into the questions of the practical working of these routes, as well as of the general capabilities of steam-vessels, and their adaptation to distant sea-voyages. River-navigation was also a good deal considered, and other matters bearing upon steam-vessels at large.†

Several Resolutions were adopted, one of which was

Members of the Committee.

* Sir James Graham, Sir Robert Peel, Sir Robert Inglis, Viscount Sandon, Lord Ossulston, Mr. Robert Grant, Mr. Hume, Mr. Stuart Mackenzie, Admiral Adam, Captain Elliot, Sir Robert Gordon, Mr. Cutler Fergusson, Mr. Lyall, Mr. Young, Mr. Shiel, Colonel Evans, Mr. Buckingham, Mr. Powlett Thomson, Mr. Todd, Mr. Rumbold, Mr. Blake of Galway, Mr. Martin of Sligo, and Mr. Strutt.

† 'Report on Steam Navigation to India,' July 14, 1834.

that steam navigation might be carried on during eight months in the year between Bombay and Suez—the months of June, July, August, and September being left for the results of further experience.

20,000*l.* to explore the Euphrates.

The twelfth and concluding Resolution recommended a grant of 20,000*l.* for an experiment to be made for communication with India by the Euphrates *with the least possible delay.*

Funds being thus made available, the management of the operative part became the next consideration. The late Mr. Cabell, of the India Board, who had already taken a very active part in the question, sounded me, from Mr. Grant, as to my readiness to undertake the management of the intended Expedition—my doing so being, in his opinion, essential to its success. The same question was put to me by Mr. Grant himself a few days later. I replied that, owing to a promise made to my family, I was not at liberty to accept the charge, unless a more competent individual could *not* be found—such as Colonel Colebroke or Dr. Colquhoun, who were eminently qualified for this task. A few days afterwards Mr. Grant sent for me, and made known to me that as Colonel Colebroke had, after some consideration, declined the position, he now looked to me to take charge of the enterprise. I at once expressed my readiness to do my best, if the King should be pleased to command my services, and it so happened that His Majesty gave directions to that effect personally the same afternoon.

The King commands my services.

CHAPTER IX.

ENTRUSTED WITH THE COMMAND OF THE EUPHRATES EXPEDITION—AGAIN COMMANDED TO ATTEND THE KING—DIFFICULTIES OF THE EXPEDITION—PREPARATIONS AT LIVERPOOL—THE 'GEORGE CANNING' CHARTERED—MR. FITZJAMES INTREPIDLY SAVES A DROWNING TIDE-WAITER—VOYAGE TO MALTA—VOYAGE TO THE COAST OF SYRIA—OPPOSITION OF THE PACHA OF EGYPT—LANDING OF THE EXPEDITION.

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Command of the Expedition.

BEARING in mind the King's permission to communicate with him from time to time, I made known to His Majesty, through Sir Herbert Taylor, that it had been settled that I was to conduct the Expedition; and an immediate reply not only signified the King's entire approbation, but also his readiness to move the Ordnance and other departments to give the necessary assistance in carrying out all preparations for the undertaking.

Had I not received this very unexpected encouragement, the difficulties I met with might have seemed almost insurmountable; but with the warm support of our gracious Sovereign, the task was rendered comparatively easy. A detailed list of our requirements was, by command of His Majesty, sent to the various departments; and the result was that everything was from time to time most willingly supplied by each.

Furtherance of the Ordnance and other departments.

The steamers, on which as a matter of course the other preparations mainly depended, were forthwith put in hand. They were the fourth and fifth of this then novel class of vessel, which has rendered such services of late years in the Chinese and Indian waters.

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General preparations and objects.

The moderately short delay necessary for the preparation of these vessels, with their water-tight compartments and other fitments, in Messrs. Lairds' yard, as well as the construction of the engines, which were got ready simultaneously in another establishment, still gave me sufficient time to arrange their armament and equipments, and to select officers and men, as well as engineers, boiler-makers, and other skilled workmen, whose services were indispensable in carrying out this peculiar undertaking, the leading objects of which embraced:—

1st, The conveyance of the materials for the two steam-vessels to the coast of Syria, and the process of landing them there.

2ndly, The means of transporting the boilers, engines, and other equipments, from the seacoast to the banks of the Euphrates, a distance of 137 miles.

3rdly, To prepare temporary docks and slips, &c., in order to set up and float the vessels.

4thly, To survey the seacoast, the line across Northern Syria, and eventually the Rivers Euphrates, Tigris, and Karūn.

Funds.

The funds—which in a popular government occupy too much attention, and are rarely obtained without much difficulty—were chiefly supplied by the Treasury; and on this department I was authorised to draw for the approved wants of the Expedition. The East India Company was, however, to contribute 5000*l.*,* and to afford some other assistance also—especially by giving the services of Lieutenant Henry Blosse Lynch,†

* Page 7 of Papers ordered to be printed by the House of Lords, February 23, 1838.

† Now Captain H. B. Lynch, C.B., K.L.S.

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of the Indian Navy, and subsequently those of Lieutenant R. B. Lynch, of the 21st Bengal Infantry.

Officers obtained from the various departments.

The Admiralty furnished four officers—namely, Lieutenant R. Cleaveland, Messrs. Charlewood,* Eden,† and Fitzjames,‡ of the Royal Navy—in addition to allotting a steamer to hasten the voyage to the coast of Syria.

The Commander-in-Chief gave us the valuable assistance of the late General Estcourt,§ then a Captain of the 43rd Light Infantry, to carry on the survey.

Instruments.

The Trinity House supplied powerful reflectors, to facilitate the navigation by night; instruments were selected and other assistance given by the Royal Observatory at Greenwich; and in connection with this branch the late Rev. R. Sheepshanks came forward in the handsomest manner, not only to give instruction and assistance to our astronomer, the late Lieutenant Murphy, but also to make arrangements to enable him to determine the latitudes and longitudes as the basis of the intended maps. But besides obtaining the services of this officer, it became necessary to draw very largely on the kindness of the Master-General, Sir James Kempt, G.C.B., and the Board of Ordnance also; for, in addition to myself, Lieutenant Murphy of the Royal Engineers, Lieutenant Cockburn of the Royal Artillery, and two medical men, Doctor and Mr. A. Staunton, a number of skilled artisans were carefully selected from the Royal Artillery and Royal Engineers, in order to

Furtherance of the Ordnance department.

* Now Captain E. P. Charlewood, R.N.

† Now Captain H. Eden, R.N.

‡ Who perished with Sir John Franklin.

§ The late Major-General Estcourt, Adjutant-General of the Forces in the Crimea.

lessen the difficulties of providing for this service. Besides officers and men, an extensive selection of goods, partly for presents to the Arabs, but principally to facilitate commercial dealings with them, was kindly supplied by this department; also some waggons, harness, pontoons, and other materials connected with the transport of the steamers, and the armament at large, which not only comprised great guns of various calibre, some cohorns, Congreve rockets, and wall-pieces, but also an extensive supply of ammunition, as well as small arms.* The latter were partly supplied from the Tower, and partly prepared at Birmingham and Sheffield, where I had the valuable assistance of the late Mr. Lovell, who was sent with me by the Board of Ordnance to select arms, and give the necessary superintendence at the same time. A diving-bell, and miners' tools of various kinds, formed part of our equipment, and of course a supply of ordinary provisions, preserved meats, and wine.

Equipments and armaments, &c.

Consentaneously with these matters of detail, the officers and men were to be especially prepared for their respective duties. Some of the former received instruction either on board the Flag-ship at Portsmouth, or from my late friend Professor Narrien, of the Royal Military College. Others had the assistance of Dr. Robinson, at the Armagh Observatory, of Mr. Sheepshanks, and that also of General Sabine, Dr. Lloyd, Admiral Beaufort, and Dr. Fox of Falmouth, for magnetic dip.

Officers and men prepared for the coming service.

* As detonating locks were at that time confined to sportsmen, only one-half of our muskets, &c. had this advantage, the remainder, by way of precaution, being flint-locks.

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With a view to the preparation of the artillerymen, Sir James Kempt sanctioned my taking them to Birkenhead, where they not only had the advantage of receiving instruction in Mr. Laird's building yard, but also acquired practical knowledge by working the engines of the ferry-boats between Birkenhead and Liverpool. Four sappers were at the same time placed under the late General Sir Charles Pasley, K.C.B., at Chatham, in order to be prepared not only for the duty of assistants in working the engines, but also for the management of a diving-bell, and instructed likewise in the method of blowing up rocks under water.

The preparations, therefore, were extensive, and commensurate with the important objects we had in view, which embraced: a survey of Northern Syria, with its coast-line on one side and the Mesopotamian rivers on the other; and a line of levels from the sea to the Upper Euphrates, with reference to the practicability of opening a canal for part of that distance.

The King commands my attendance.

On making known to Sir Herbert Taylor that our preparations were almost completed, the King was pleased to command my attendance at St. James's on November 19.

Capability of the officers.

His Majesty at once entered upon the subject of steam-communication with India by the Euphrates, and went at some length into my recent proposal of opening simultaneously a second line through Egypt. Then turning to that of Arabia, and the preparations for its establishment, as well as its political advantages, particularly with reference to an invasion of India, His Majesty enquired into the character and qualifications of the various officers selected for the Expedition,

beginning with Captain Estcourt and Lieutenants Lynch, Cleaveland, and Cockburn, and then into those of Messrs. Charlewood, Fitzjames, Eden, Ainsworth, Thomson, and the two Stauntons; also—though in a more general way—enquiring about the men for the Expedition. His Majesty having kindly expressed his approbation of all my arrangements, my own turn followed, and it became necessary to answer some of those questions which *at times* the late King was wont to put rather bluntly. Having replied to enquiries about my birth, age, and services, His Majesty suddenly added, 'But who is your father?'—'Please Your Majesty, an American loyalist, who, at the head of an independent troop of dragoons, was twice wounded and three times taken prisoner.'—'Well?' said the King, in a tone which unmistakably expressed What then?—'Please Your Majesty, my father served under Lords Moira and Cornwallis, and being with the latter when the capitulation of Charleston ended the war, he returned to Ireland almost penniless, his property on the Packolet River, in South Carolina, having been confiscated. But all was not quite gone; for, as a loyalist, he not only received a revenue appointment, but an additional compensation in consequence of the arrangements made by the Government of Your Majesty's father; and it was owing to a kind recollection of the American campaigns by Lords Moira and Cornwallis, that my brother and myself received appointments in the service.'

Personal and family enquiries by the King.

The King then reiterated his approbation of all the arrangements and preparations made for the Expedition, expressed a desire to have the first copy of the intended

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maps, and, on taking leave, with much warmth gave me his blessing.

Departure of Lieut. Lynch.

Two or three days later Lieutenant Lynch left for the coast of Syria, to get camels and make other arrangements for the reception of the Expedition; but just as all seemed to be ready, unexpected changes occurred at home, giving rise to the most trying delays.

The Duke of Wellington took office at this moment, and on finding that there had been difficulties about brevet rank in my case, he at once ended what had hitherto been a vexed question by a Minute, stating 'that Captain Chesney should go out as Colonel on a particular service, and leave the rest to His Majesty's Government,' which no doubt in part bore reference to my offer (which had been accepted) of serving without pay. My commission was made out accordingly. Another question, however, remained to be settled. I had urged the authority of martial law in case of necessity, about which the popular feeling of the moment caused some difficulty. This was also at once decided by the Duke during my interview with him on December 8, when he proposed to send the requisite commission to meet the Expedition at Malta. A still more serious question next arose as to where the Expedition should land. Lord Ellenborough, who was now at the head of the Board of Control, sent for me with the intention of substituting Basrah for the coast of Syria. I stated various objections to such a change, amongst others my belief that an ascent instead of a descent of the River Euphrates would dispose the Arabs to be hostile to what would appear to them like an invasion of their country. His Lordship listened readily and discussed

Martial law proposed.

Lord Ellenborough proposes Basrah,

the bearings of the question without, however, quite giving way, but expressed his willingness to abide by some practical opinion. I suggested that of the Hydrographer of the Admiralty; and, as 'time and chance' would have it, Sir Francis Beaufort was actually in the waiting-room at the moment, and gave us his decided opinion 'that the landing in Syria would be far more speedy, and that if the Expedition proceeded by way of Basrah, we should hear no more of the undertaking.' This was considered conclusive. The instruction of the men and the preparation of the two vessels were resumed next morning at Birkenhead, and continued until a fresh summons recalled me to London to receive orders to break up the Expedition altogether.

but decides for Syria.

If the reader is becoming interested in me and my difficulties, he will go along with me in the singular concatenation of circumstances which gave me encouragement as I was on my way to the India Board next morning for this purpose.

The abandonment of the Expedition proposed,

Passing along St. James's Street, I met, in succession, precisely *the three individuals* who were able to give me the most important information relative to the prospects of the Expedition—and when it was a thousand to one against my meeting one after the other at this particular crisis. The first was Sir Robert Gordon, who assured me that there must be some misunderstanding about the object of my recall, since the Duke of Wellington himself had told him that he had explained to Lord Ellenborough, that as the Expedition had been organised in consequence of an Act of Parliament it would not be right to break it up. This was cheering.

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The second, and my particular ally on this occasion, was the Turkish Ambassador, Namik Pacha. He informed me that he had now received instructions to give the Expedition every furtherance. With my hopes thus raised, I met my third friend Mr. (now Sir John) McNeill, who, on hearing that it was in contemplation to break up the Expedition, took a letter from his pocket and read these conclusive words from Lord Ponsonby—then Ambassador at Constantinople—'I have carried the Euphrates question.' These bright hopes, however, only lasted until I reached the India Board, where Lord Ellenborough made known to me that the Expedition was to be broken up on account of the determination of the Porte to stop it. Without going into the rest of the information I had just received, I expressed my surprise as regarded the Porte, Namik Pacha having just told me that he was instructed to give us every furtherance. Lord Ellenborough reverted to his previous intention, and instructed me to prepare a statement to show what could best be done with our various materials, when breaking up the Expedition.

I accordingly placed a paper to this effect in his hands the next morning, when I had the agreeable surprise of hearing from his Lordship: 'I find that you were quite right about the Porte—therefore return to Liverpool at once, and get to sea as soon as you can.' Nor *was* any time lost in pushing on our preparations, in which I was zealously assisted by the officers of the Expedition, as well as by Mr. Laird, who had already done his utmost to secure our success.

but afterwards given up.

I had now entered on my duties as Commander of the Euphrates Expedition, and that the reader may

understand the position in which I stood, I give the instructions under which I acted :— CHAP. IX.

INSTRUCTIONS.

No. 1.—*Letter from the Duke of Wellington to the President of the Board of Control.*

'Foreign Office, November 28, 1834.

Duke of Wellington to President of Board of Control.

'SIR,—I transmit to you herewith a Commission which the King has been graciously pleased to grant under His Royal Sign Manual to Captain Chesney, R.A., constituting and appointing him, with the rank of Colonel on a particular service, to be a Commander of the Expedition about to be undertaken for the establishment of a communication between the Mediterranean Sea and His Majesty's possessions in the East Indies by means of a steam-communication of the River Euphrates, in conformity with the recommendation of the Committee of the House of Commons to that effect.

'I am at the same time commanded by the King to signify to you His Majesty's pleasure that an instruction to the following effect be addressed to Colonel Chesney :—

'As the object of the House of Commons in appropriating a large sum of money to be employed by His Majesty for the purposes of this Expedition was the promotion of the commerce and general interests of His Majesty's subjects, it will be Colonel Chesney's first duty to use every exertion to secure the success of the Expedition in the shortest possible time, and always to bear in mind the necessity of making his arrangements

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in such a manner as that their utility may be permanent in the event of his success.

Duke of Wellington to President of Board of Control.

'Colonel Chesney will further be careful to maintain the most perfect discipline and subordination among the persons who compose the Expedition. He will explain to them that His Majesty will view with the severest displeasure any conduct on their part calculated to defeat the objects of the Expedition, whether arising from disagreement among themselves, or from an indifference to the habits and prejudices of the inhabitants of the country in which they are employed.

'It will be the duty of Colonel Chesney, and of every other individual, to conciliate to the utmost of his power the friendship and goodwill, not only of the authorities of the Grand Seignior, but of the different communities and tribes with whom he may have intercourse; to abstain from all acts calculated to rouse the prejudices of the inhabitants; to take no part in any disturbances or quarrels which may exist among adverse tribes; and to avoid all acts of violence, unless in the last extremity, for the preservation of the lives of His Majesty's subjects.

'In short, Colonel Chesney is always to bear in mind that the character of the Expedition is one of peace; that it is undertaken with the permission of a friendly Power, without whose countenance and co-operation success cannot reasonably be expected; and that having for its object peaceful and beneficial interests, it is only to be conducted by peaceful means.

'Colonel Chesney will find His Majesty's Ambassador at the Porte instructed to afford him all possible assistance in the way of representation to the Turkish

Duke of Wellington to the Board of Control.

Government on any occasion where the intervention of that Government with its authority is required. Colonel Chesney will communicate with His Majesty's Ambassador on all such occasions, and pay to his suggestions that attention which the position held by him at the Porte entitles him to expect.

'Lastly, Colonel Chesney will report from time to time, for the information of His Majesty's Government, the progress and prospects of the Expedition.

'I have, &c.

(Signed) 'WELLINGTON.'

No. 2.

Letter from Lord Ellenborough to Colonel Chesney.

'India Board, January 24, 1835.

Lord Ellenborough to Colonel Chesney.

'SIR,—It does not appear necessary to give you any further instructions for your general guidance in the prosecution of the object of the Expedition under your command, beyond those which you have already received from the Duke of Wellington.

'The Minute of the Lords Commissioners of His Majesty's Treasury, which has been communicated to you, points out the mode in which you are to draw for the necessary funds.

'You have been already informed that His Majesty's Government cannot apply to Parliament for any grant in addition to that of 20,000*l.* which has been so liberally made, for the purpose of ascertaining the practicability of navigating the Euphrates.

'You will always bear in mind that that is the one object of your Expedition, and that scientific enquiries,

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Lord Ellenborough to Colonel Chesney.

however interesting, are not to be allowed to detain you.

'This caution is become the more necessary, since you leave England at a period subsequent to that at which it was first calculated by you that you would arrive at the mouth of the Orontes.

'Should you arrive at Basrah by descending the Euphrates, you will consider yourself to be under the command of the Bombay Government. You will immediately on your arrival repair and refit your steamboats, so as to be enabled to execute any orders you may receive.

'In the event of the season being favourable for the voyage to Bombay, you are at liberty to proceed at once to that port. This measure may possibly be rendered advisable by the consideration due to the health of the officers and men under your command.

'Such of the officers and men as the Bombay Government may not deem it necessary to retain for the purpose of repairing the steamboats, or of the further prosecution of the plan of navigating the Euphrates, will immediately proceed to England.

'Should the Bombay Government decide upon prosecuting the navigation of the Euphrates, and the steamboats be despatched for Basrah at an early period, that Government is empowered to afford, to such of the officers and men as may desire it, the opportunity of returning to England by the way of the Euphrates on the steamboats.

'In the event of your finding it impracticable to convey the steamboats from the mouth of the Orontes to the Euphrates, and of your abandoning the project of

descending that river on that or any other ground, you are at liberty to proceed with the steamboats to Bombay.

Lord Ellenborough to Colonel Chesney.

'On your arrival at Bombay, you will place yourself under the orders of the Bombay Government.

'Immediately on your arrival on the Euphrates with the materials of the steamboats, you will communicate to the Bombay Government every particular you may think necessary, in order to enable them to judge of the probable time of your reaching Basrah, and to take measures for sending a steam-vessel, or a vessel of the Indian Navy, to meet you there, and convey instructions to you.

'I remain, &c.
(Signed) 'ELLENBOROUGH.'

Owing to the novelty of the undertaking, there was some difficulty and delay, even in the great port of Liverpool, in finding a vessel suitable for landing all our materials at the estuary of the Orontes. The 'George Canning' was, however, soon put at our disposal, and as our engagement with her owners was to terminate as soon as the landing should be completed, we endeavoured to ship our cargo in such a way as would best facilitate this operation. Had this pre-arrangement been dispensed with, our departure might have been slightly hastened; but as it was, the framework of the two steamers and everything else were placed on board by February 1, 1835, in the prescribed order, with the exception of the contents of the magazine, which, as a matter of precaution, had been kept back till the last moment.

Embarkation of the materials, &c.

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Whilst taking the ammunition on board a circumstance occurred, which, as commemorating the gallant conduct of Mr. Fitzjames, deserves a corner in these pages. I give it in the words of his brother-officer, Mr. Charlewood: 'At daylight I commenced getting everybody and the remainder of the stock on board. The last thing was the powder, which came alongside in a Birkenhead steamer. I was in the magazine superintending the stowage, when the cry of "a man overboard" brought me on deck. It proved to be the tidewaiter in attendance, who, on stepping from the steamer to the ship, had slipped overboard between the two vessels. Fitzjames saw this, and was after him in an instant. Never have I seen anything done so nobly. The tide was running at the rate of six knots, with a strong breeze and piercing cold, yet Fitzjames managed to keep the man up (who could not swim) till they were picked up about half a mile astern. I never felt so happy as when we saw him once more safe on board. Most richly does he deserve promotion. It is blowing a gale from the south.'

Fitzjames's gallant conduct.

Fitzjames's bravery was not overlooked. His companions in future difficulties and dangers hailed his gallant conduct as an omen of success, and it awakened also a warm and generous local feeling; for a deputation from the Town Council of Liverpool came off to present him with a cup and the freedom of the borough, which fact was, as a matter of duty on my part, made known to Lord Ellenborough, and to the King also, through Sir Herbert Taylor.

Throughout the whole of our Expedition Fitzjames evinced this same gallant, unselfish, and joyous disposi-

tion, combined with untiring energy, which no doubt sustained him to the last through the far greater perils and sufferings, ending in lingering death, which he encountered and shared at a later period, with his noble friend and commander Sir John Franklin.

Departure from Liverpool.

The number of our seamen being now complete, the 'Blue Peter' was hoisted on February 4; but continued gales detained us until the 10th, when, though the weather was still stormy, we put to sea, and having landed Mr. Charlewood when beating past Waterford, that he might cause our stores to be ready at the Cove of Cork, we arrived there during the night of the 13th.

Supplies at Cove of Cork.

A supply of provisions for two or three years was promptly furnished from the Government stores, and we were joined by H.M.'s steamer 'Alban,' which, at the particular request of Lord Ellenborough, had been given by the Admiralty to expedite our voyage, and she towed us out of Cork Harbour on February 16; but our expectation of assistance from the 'Alban' was but brief, for she cast us off after a few hours, and we saw nothing of her next morning, nor indeed during the whole of our voyage to Malta, where we arrived on March 12, having experienced very stormy weather in the Bay of Biscay.

Men, &c. obtained at Malta.

At Malta it had been previously arranged that we were to receive boats suited for the landing in Syria, and other requisites from the dockyard, as well as ordnance stores. But as we had arrived before our instructions, I feared that we should meet with delay. A sight of the Duke of Wellington's orders, however, secured the zealous co-operation of one of his distinguished officers,

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Sir Frederick Ponsonby, the Governor of Malta.* He took me to the Admiral at once, and put everything in train in the different departments, adding to his kind services the special request that a steamer should be ordered to tow the 'George Canning' to the coast of Syria.

Among our acquisitions at Malta was the important one of two flat-bottomed boats to facilitate our landing. We had also an unexpected addition to our party. Mr. Christian A. Rassam, a native of Mossŭl, where he has now been Vice-Consul for many years,† enthusiastically quitted his position at the Malta College to be useful to the cause which he had much at heart—that of opening up his country to intercourse with Europe—and joined the Expedition as principal interpreter. Twelve Maltese were engaged under him to facilitate our communications with the Arabs and be generally useful. In eight days everything was ready, but the 'Alban' had not yet turned up; and the Admiral, Sir Thomas Briggs, being without an available steamer, he kindly offered the 'Columbine' (sloop-of-war), as the best substitute he had it in his power to give. I gladly accepted it, and she proved of invaluable service. On making this known to her commander, Captain Henderson, over the quarantine railing, he called out, 'My fore-yard is still ashore, but if you will sail at once, and burn a blue light

Mr. C. A. Rassam joins us.

Sloop 'Columbine' to accompany us.

* The late Sir Frederick survived Waterloo almost miraculously. Being brought to the ground when leading his regiment by several desperate wounds, his body served as a parapet for one of the enemy's tirailleurs, who loaded and fired several times under this cover, saying a word or two occasionally in a cheerful tone. But at length the advance of our troops caused him to leave his cover, which he did, saying, 'Je vais te quitter, mon ami.' Sir Frederick remained for some time in his helpless position: at one time a passing artillery officer (whom he never met afterwards) gave him—what was then beyond all price—a little water, adding some cheering words at the same time.

† Since December, 1839.

occasionally after ten o'clock, the "Columbine" shall be with you before morning.' We accordingly prepared to leave forthwith, inspirited by a most hearty farewell. The boats of the fleet were manned, and towed the 'George Canning' out of the inner harbour of Valetta amidst animating cheers from the ramparts.

Towed out of Valetta Harbour.

The wind was favourable, and by midnight our rockets and blue lights were answered by a gun, and the 'Columbine' was in company soon afterwards. We were taken in tow almost immediately, and this important aid was given most willingly throughout the voyage.

The weather continued favourable, giving us the opportunity of employing our time usefully, as we glided along in the sloop's wake. Besides ball-practice, sword-exercise, and the usual drills, which had been carried on during our voyage to Malta, such occupations as the construction of canvas and other boats, and anything that seemed likely to turn to account in the future, kept us fully employed—in all which the 'Columbine's' carpenters lent their assistance.

Voyage and exercise of the men.

Nine days of energetic occupation brought us to Cyprus, which, in accordance with the desire expressed by Admiral Beaufort, was to be connected by triangulations with the coast of Syria; while the report that plague existed on the mainland was an additional reason for communicating with the island. Accordingly, we stood into the Bay of Larnica, where, to our great disappointment, we learnt from the quarantine boat, not only that the plague existed in the town, but also in some parts of the country before us. As it was all-important to ascertain the true state of things with reference to this scourge, which might in fact have put an end to

Cyprus.

The plague.

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Proceed in the Columbine to Beïrût.

our enterprise, I proceeded with Commander Henderson, in the 'Columbine,' with all speed to Beïrût, where her gig took me soon after dark within speaking distance of Mr. Chasseau, H.B.M.'s Consul. His intelligence was on the whole satisfactory, for, although the plague existed elsewhere, I learnt that there was none on the banks of the Orontes, and I also ascertained that Lieutenant Lynch had made the necessary preparations at Suedia for the landing of the Expedition. Returning with this encouraging news, the 'Columbine' again spread her canvas wings; but the wind failed, and our progress was exceedingly slow. Therefore it was only on April 2 that we sighted the 'George Canning,' then hull down. But the next morning we were ahead of her, with Jebel Akra (or Mount Cassius) before us.

It was an interesting moment, when with a fresh and fair breeze we rapidly approached our destination. The bald crest of the mountain (from which it derives its name of Akra, or Bald) left no doubt that the estuary of the Orontes would be found somewhere in its vicinity; but the question was, on which side of the mountain? The pilot of the 'Columbine,' a Greek, although specially chosen as knowing this part of the coast, admitted, *just then only*, that he had never been in the Bay of Antioch; in fact, there was but one individual present (myself) who had ever been in this neighbourhood before, and that only by land. We continued our course, however, for some time, finding no bottom with 25 fathoms of line; and as there was no appearance of the River Orontes at the foot of the mountains stretching northward of Cassius, which we were then approaching, I continued to look out with doubt as well as anxiety, until all suspense was ended by a

Approach to the Bay of Antioch.

sight of the unmistakable landmark of the extensive line of excavations behind the ruins of Seleucia. In less than an hour from this time the 'Columbine' shortened sail, and being now in 10 fathoms water, and sufficiently near to the shore, she tacked and stood towards the south side of the bay.

Seleucia in sight.

Although in a well-regulated man-of-war it is a brief operation to take in sail and pay out more cable, there was still ample time, while these orders were being executed, to look round and examine the magnificent scenery, which I had not previously seen from the water.

A glance at the shore showed us the estuary of the Orontes at the distance of a short two miles, the masts of some small vessels appearing above its banks. Elsewhere the bay, which is seven miles wide, is encircled by a mountain girdle of striking grandeur, varied here and there by spots of soft and most attractive scenery. Southward, a wall of rock rises from the water below the wooded sides and culminating bald peak of Mount Cassius, from which the outlying range of Jebel El-Akrab runs eastward at an elevation of 5,318 feet. Parallel to this bold range is the valley of the Orontes, with the hills of Antioch showing near its termination.

Appearance of the bay, &c.

A little to the northward of the El-Akrab range appears Bin-Kiliseh (a thousand churches), and the ruins of the convent St. Simon Stylites, standing amidst groves of arbutus and myrtles. More northward still, and forming the opposite horn of the Bay of Antioch, is Jebel Mūsa, a wooded and picturesque mountain, with the extensive cavern and excavations of Seleucia on its lower slope, which terminates this remarkable panorama.

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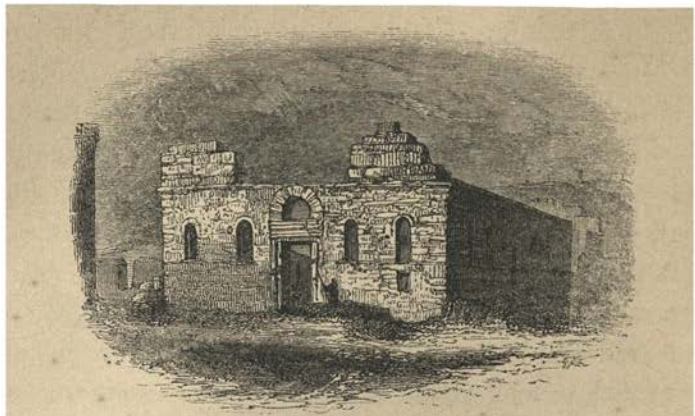

RUINED CONVENT OF ST. SIMON STYLITES.

The two vessels anchor in the bay.

I lost no time in landing near Suedia, but it was quite dark before we arrived; and finding a good deal of surf on the beach, I was forced to give up my intention of communicating with Lieutenant Lynch, and returned to pass the night in the 'George Canning,' under the impression that all was now smooth. We were wholly unprepared for the vexatious and almost insurmountable impediments which we subsequently encountered, but which were eventually overcome during the succeeding eleven months by the officers and men of the Euphrates Expedition.

TOMB AT SELEUCIA.

CHAPTER X.

THE EXPEDITION LANDS AT THE MOUTH OF THE ORONTES—PREPARATIONS FOR CROSSING NORTHERN SYRIA TO THE EUPHRATES.

Port of Antioch.

We were all on deck by sunrise the next morning (April 4), gazing with delight and admiration at the magnificent scene before us, of which the description at the close of the preceding chapter can give but a faint idea. For grandeur, varied beauty, and extent, it could scarcely be surpassed. The ancient tunnel and rock-

TUNNEL AT SELEUCIA.

excavations of Seleucia were visible from our deck, as well as a small part of this once famous and extensive port; but the little town of Suedia, although scarcely a mile from the ship, is completely hidden in the dense mulberry plantations which surround it.

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We did not, however, allow ourselves much time for the contemplation of the scenery around us. Lieutenant Cleaveland was sent on shore, and returned with a favourable account of the landing-place, accompanied by Yusuf Saba, Sheikh of Suedia, who brought us the unwelcome intelligence that no firman had been received requiring the local authorities to further the Expedition, and that Lieutenant Lynch had in consequence discharged the camels which he had previously hired for the transport of our materials. This report caused us some uneasiness, but did not prevent us from making a beginning by sending two boats, under command of Lieutenant Cleaveland, to explore the Orontes. He proceeded for fifteen miles up the river, which he found to be very rapid near its mouth, with a current of about four miles an hour, and an average breadth of 90 yards. At the termination of the Valley of Suedia, the Orontes flows between steep and lofty mountains, tumbling over a rocky bottom, shallow in some places, and very unnavigable. The scenery is wild and very fine. The sides of the hills are covered by deliciously fragrant aromatic plants, while the Valley of Suedia is rich in mulberry-groves grown for the sake of the silk, which is made there in large quantities.

Boats sent up the Orontes.

On landing we carefully examined the country around the estuary of the Orontes, with reference to a healthy station for disembarkation; and whilst occupied the next day in putting up a pair of shears at the landing-place we had selected, and in arranging landmarks, &c., a letter from Lieutenant Lynch made known to me the startling fact that Mehemet Ali had not only recently withdrawn the orders which had been given,

Landing-place selected.

Mehemet Ali withdraws his permission to land.

to afford every facility for the landing of our steamers, but had actually forbidden the local authorities to give us any assistance in transporting them to their destination.

Opposition of the Pacha of Egypt.

Such adverse circumstances seemed, at first sight, to put an end to all hopes of success. I had indeed foreseen that the Pacha of Egypt could not desire to see any obstacles placed in the way of his ambitious projects by the opening of a highroad to India through his recently acquired territory, and I was therefore prepared, in some measure, for *indirect* opposition, but I had never supposed that he would venture to go so far as to oppose the British Government. But so it seemed to be, and an anxious consideration of the present dilemma suggested three courses, any one of which was open for selection.

Choice of difficulties.

The first of these alternatives—as the landing of our materials had not been commenced—was to return to Malta, and wait there until Government could take some decided step. The second was to make preparations to sail round Africa, and begin operations at Basrah. The third was to land the whole of the materials forthwith, and having shown, by the departure of the two vessels, that the enterprise *would not be given up*, to endeavour, by every means still available, to transport our steamers across the country so as to float them on the River Euphrates.

Believing that the last course would have been most in accordance with the instructions of Government, if instructions could have been asked, and being also convinced that high ground would be taken at home without delay, I determined to adopt it as the line most befitting

CHAP. X.

Determination to land the stores.

a great nation. Expecting, at all events, to be able to anticipate open opposition, it was at once arranged that our stores should be landed with all possible despatch, and that the two vessels should then quit the coast of Syria. Our work was, therefore, commenced next morning with hearty goodwill, in which Commander Henderson and the men and officers of the 'Columbine' joined.

Some of 'Columbine's' officers and men landed.

At daylight on April 6, two officers and twenty-five men were landed from this ship, and whilst they were preparing our encampment, our two flat-boats, with the 'Columbine's' launch, pinnace, cutter, jolly-boat, and skiff, continued landing stores and materials throughout the day. To facilitate this operation, a hawser was carried from the shore over the bar, along which the boats passed into a small creek, which we had cut in order to land the heavy weights under a pair of shears. Favourable weather enabled us to do a good deal, both towards the landing and preparing the encampment, which advanced simultaneously with the aid of the 'Columbine's' officers and men.

Store and other tents pitched.

Their first object was to pitch a roomy store-tent by means of the spare booms and lower studding-sails of the brig. A mess-tent, four marquees, and ten bell-tents for the men, were then set up—also the observatory tent, and a smaller one adjoining it for the telescopes, theodolites, and other instruments; the whole of which, as well as the machinery about to be landed, were to

A parapet round the camp.

have the protection of an earthen parapet. In the course of three or four days this work was constructed, having a fieldpiece at one angle, and other means of

defence. Our camp, to which we gave the name of Amelia Depôt, was soon rendered defensible, and made quite an imposing appearance.

Process of landing the heavy weights.

On the following morning our labours were resumed with increased facilities. The short line carried over the bar had been replaced by another of 1,200 yards in length, going the whole way to the 'George Canning.' This lessened the labour very much, for the heavily-laden boats were hauled along it to the land, and rowed back again to the vessel when discharged. During this day's work, which was productive of great results, Yusuf Saba came to me in a state of absolute consternation to ask for our firman, as, failing such authority, he had been ordered to interdict our landing. Fortunately, the want of an interpreter at this moment prevented anything explicit from passing between us, and we continued our exertions with, if possible, greater energy than before.

Examination of the Orontes.

The examination of the Orontes, with reference to its facilities for transport, was carried on at the same time, but Lieutenant Cleaveland's report to me, on the extent to which the river might be made available, was not very promising.

On the evening of the 8th, Lieutenant Lynch arrived from Aleppo, and from his intelligence, as well as from letters just received from the Consul-General of Egypt (Colonel Campbell), and from the Consul at Damascus (Mr. Farren), it was too clearly though *indirectly* implied that secret orders had been issued to stop the Expedition, instigated, as we felt but too sure, by Northern influence. Of these adverse intentions we soon had unpleasant proofs. I fortunately heard, the

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Visit from the Governor of Antioch.

next morning, that the Mutsellim of Antioch had arrived at Suedia for the express purpose of stopping our proceedings, and I requested Captain Henderson not only to receive him with a guard of marines, but to give him a salute of eight guns, and invite him to lunch. I anticipated what he had to say by making a strong remonstrance about the want of assistance rendered to us, adding that Captain Estcourt was then on his way to Damascus,* in order to *demand* the requisite order for assistance from Sheriff Pacha; adding that, in the meantime, the landing would be continued under the protection of the 'Columbine's' guns.

Having with manifest anxiety, and great reluctance, agreed to await an answer to the letter now on its way to Damascus, the Mutsellim took his departure, after having been shown every part of a British man-of-war.

Heavy boiler landed.

The day after this visit (April 10) was marked by the successful landing of one of the heaviest pieces of boiler in one of our flat-boats, with a pontoon lashed on each side of it to give it additional buoyancy as well as stability, and also by the recovery of some of the indispensable parts of the steamer's engines. A cask containing the valves of both engines had broken its slings on the previous day, and rolled to the bottom of the river, which was at this season exceedingly turbid. The difficulty of finding and recovering the cask was very great, but I fortunately recollected that my friend Mr. Coulter had contrived an ingenious double cramp, with the idea of raising stones from the bed of the Euphrates, which I applied to the recovery of our lost cask. This instrument resembled a pair of can-hooks. A

Loss of a cask, and its recovery.

* See Appendix III. for Captain Estcourt's Journal.

Lieut. I. Fitzjames R.N. Delt. C.H. Fairland Lith.

THE BOILER PASSING THE BAR OF THE ORONTES.

diver went down, found the cask, and adjusted the cramp, which grasped it firmly; the slings happily bore the weight, and it was safely drawn up, to our great relief, for the loss of the valves would have disabled both engines, and this under existing circumstances would have been an irreparable misfortune to us. This difficult operation was effected by Mr. Charlewood.

Survey of the coast commenced.

At this period Lieutenant Murphy, accompanied by Messrs. Ainsworth, Thompson, and A. Staunton, left the camp to survey the coast between the Bay of Antioch and Lattaquia. They made a commencement by ascending Mount Cassius, through its wooded slopes to its bald peak, which they made their point of departure for the survey. Of course our proceedings did not fail to attract the attention of the Egyptian authorities, and several of the Pacha's officers paid us a visit, in order to ascertain what we were doing. One of the number, a good-natured intelligent Pole, bearing the appellation of Hajji, on seeing our boilers and bedplates, &c., was heard to exclaim, 'Quand vous avez tout cela à Berejik——'and here he broke off from want of terms in which to express the utter impossibility of the accomplishment of our project. Nor was he very wide of the mark; for although the task was not, as he supposed, *impossible*, it proved to be *almost* Herculean.

Bad weather.

Rough weather coming on, it had become very difficult, and at times it was dangerous, to pass the bar of the Orontes, and the Expedition narrowly escaped a serious calamity just as the landing was all but completed.

Capt. Henderson's boat upset.

On April 13, when Captain Henderson, with his usual daring, was passing through the surf on the

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bar, his gig was upset. Mr. Fitzjames happened to be on the bar at the moment, but with most inefficient means of assistance at hand; of these, however, he made the best possible use, and, as it proved, successfully. I give the incident in his own words:—

Mr. Fitzjames's account of the affair.

'At about 4 P.M., as I was landing through the surf in the launch, I observed astern the Captain of the "Columbine" in his gig, with four men pulling with difficulty through the surf, and at last a sea struck and turned her over. We instantly hauled astern, but the current had swept them all to the southward, and out of our reach. I saw two of the men land on the bar and walk to a low point near it, while the other two held on to the boat, but Captain Henderson came close to us, and seemed nearly overpowered. I threw him two oars, and he fortunately grasped one of them. We could not go to his assistance, as we had no oars, and had we let go the rope,* we should have been swamped also. It would have been madness to have jumped after him. We suffered the most intense anxiety, hearing his call for help, and not being able to do anything, till a boat from the "George Canning" picked him up completely exhausted. The "George Canning's" crew picked up the two seamen, going with great difficulty through the surf. The "Columbine's" boat was washed ashore, and we all felt thankful that no life had been lost. Of course (the intrepid Fitzjames adds) no more work was done that evening.'

The support of the oar would have proved in-

* The laden boats did not row, but were hauled along the line from the 'George Canning' to the shore.

IBRÁHÍM PÁSHÁ.

sufficient if nothing more had been done, but Mr. Charlewood, seeing from the deck of the 'George Canning' what was taking place, caused a boat to be lowered and manned (so speedily that he scarcely knew how it was done), and hastened to the spot. He, however, was barely in time to rescue Captain Henderson and his crew from a watery grave. But the 'Columbine's' gig was righted, and Captain Henderson returned to his ship. His first thoughts, after his own fortunate preservation, being for others, the signal of 'Bar impracticable' was immediately sent up.

Rescue of Captain Henderson.

Three days after this event, Captain Henderson took me to Lattaquia in the 'Columbine,' in the hope of bringing about some change in our anomalous position. But Ibrahim Pacha had already left, and we therefore returned to the camp (April 20), where we had the satisfaction of finding that the magazine had been cleared out, and the rest of the 'George Canning's' cargo, with the exception of the coals, had been landed. Still all our efforts to procure animals had been fruitless, for the people were now quite aware that they must not render us any kind of assistance.

Visit to Lattaquia.

In the hope of overcoming this difficulty by obtaining the support of the local authorities, Captain Henderson took me to Tripoli, and on April 24 I had an interview with Ibrahim Pacha, the officers of the 'Columbine' being present. I did not fail to urge (what I presumed would have much weight) the heavy outlay now so uselessly incurred, and for which the British Government would consider him responsible. To this, however, and much more to the same effect, he made the general reply, that he was only his father's

Remonstrances with Ibrahim Pacha.

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lieutenant, and consequently without any power to act. Hoping that a little time might produce some change for the better, I told the Pacha that I should return to Suedia, and that if a more favourable reply did not follow me thither, I must make a statement to the British Government, in order that the necessary steps to enforce assistance might be taken; adding that the number of engineers and other workmen must cause a heavy demand for the unnecessary delay to which we had been subjected; and I might have added, had it not been somewhat injudicious to do so, that I was aware he had induced his father to take the same hostile course as himself.

To make the best of circumstances was now our only course. My previous acquaintance with the geography of the country lying between the Mediterranean and the Euphrates prepared me for its varied nature, and for difficult ground in certain places, especially when the transport of heavy weights was in question. The whole distance to be accomplished was about 140 miles, which might be divided into two sections: the first comprising the district lying between the sea and the eastern shores of the Lake of Antioch; the second that stretching from the Lake of Antioch, or White Lake, to our destination on the Euphrates, near the important town of Bir. This latter tract of country, with the exception of some hilly ground near the town of Azaz, is nearly a dead level, and possesses several well-peopled villages, with—what to us was very important—a large number of draught-bullocks.

Description of lines of route:

But if the difficulties were comparatively trifling on this second half of our line, they were propor-

tionately formidable on the former one. Our careful examination of the country had shown us, that there were three lines more or less available for reaching the Lake of Antioch from the mouth of the Orontes. One was the circuitous route through Aleppo, using camels for carrying light weights; the second was by the Orontes as far as Gūzel Burj, and across the Lake of Antioch to Mūrad Pacha; the third could only be accomplished by opening a road across some steep and difficult hills, as far as the greater and lesser rivers Kara Chaï, and thence on to Gūzel Burj, whence, passing through a labyrinth of rocks, we should reach the general landing-place at Mūrad Pacha on the farther side of the lake, where we should come upon the open country.

Lieut. Lynch's preparations on the river.

We had now to ascertain, practically, how far either or all these lines might be made available for the transport to Bir, whither Lieutenant Lynch had already gone, and where he was engaged in making the necessary preparations for our arrival at this our intended station on the Upper Euphrates, where affairs looked more promising than could be the case within the limits of the territories still occupied by Mehemet Ali. For, as our vessels were to be set up and completed within the Sultan's dominions, the Vizir of Asia had the power not only to give us the site which had been selected, but other facilities also, so long as our operations were carried on within the boundaries of his Government. These, however, only extended to a short distance westward of the river. A few words will make our position clearer to the reader.

Description of Bir.

Bir, or Birejik, is built on the side of a chalky range of hills which rise abruptly from the water, and follow

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the left bank of the Euphrates as far as about eight miles below the town. This place was in many respects unsuited for our station, having, among other drawbacks, the serious one of a ferry. A site was therefore carefully selected on the right bank of the river, about $2\frac{1}{2}$ miles below Bir, where Lieutenant Lynch ascertained that slips could be constructed at 35 or 40 feet above the water-line, and where there would be sufficient space for buildings, stores, and workshops, which might be enclosed and protected by a parapet-wall.

This was Lieutenant Lynch's work at this period, whilst Messrs. Murphy, Ainsworth, and Thompson were, as has been already mentioned, surveying the Bay of Scanderoon, and our other officers and men were opening waggon-roads across the country, and preparing rafts to convey our heavy materials to Antioch.

Capt. Estcourt returns from his mission to the Vizir.

On May 3 Captain Estcourt returned to the camp from Damascus, where he received the unsatisfactory answer from Sheriff Bei, the governor, that he was without any instructions to assist the Expedition. Captain Estcourt had also, on his way back to Amelia Depôt, visited Ibrahim Pacha at Tripoli, who gave him much the same reply as I had received from him, but entered more fully into the objects of the Expedition, its contemplated proceedings, and the capabilities of the River Euphrates for navigation.

The 'Columbine' leaves for Malta.

Early on the morning of the same day the 'Columbine' had left for Malta, receiving and returning our salute of seven guns; and the reverberation of her 32-pounders in the Bay of Antioch told us plainly enough that we were losing the valuable and unwearied assistance of her commander, officers, and men. The 'George Canning'

had been previously discharged, and we knew that we should soon see whether the fact of the Expedition being without the means of quitting Syria would, or would not, be sufficient to convince Mehemet Ali that any further opposition on his part must be useless.

Chiefly to give him an additional proof that our objects *would be* carried out, but partly also for the sake of avoiding the evils of idleness, we commenced setting up the 'Tigris' steamer on May 6. This gave ample occupation to all in camp; while our other works, including our station at Bir, which I had named Port William, continued to progress satisfactorily. But the main object, that in fact on which all else depended—the transport of our stores and materials—was quite at a standstill. Ibrahim Pacha not only continued unmoved by all our applications for assistance, but his orders to withhold all aid were strictly obeyed.

Setting up the 'Tigris' begun.

Finding that camels coming to us were constantly stopped by the orders of the Pacha, and that our detention at Suedia must be complete if we depended on Egyptian support, we turned our thoughts to the Sultan's territory, and the means of assistance which it could afford. The small, shaggy, double-humped camel of the Turcomans was already doing us good service, as far as the conveyance of our lighter materials was concerned; but the steamer's bent plates—to say nothing of the machinery—were quite beyond the powers of this animal. There was no prospect of accomplishing our task unless other means could be found.

Camels prevented from coming to us.

The best, and indeed the only, remaining resource seemed to be an appeal to the Vizir of Asia, Reschid

Appeal to the Vizir of Asia.

CHAP. X.

Pacha; and Captain Estcourt undertook this second mission, leaving the camp on May 7, accompanied by Dr. Staunton.*

Arrival of Ibrahim Pacha at Antioch.

While he was on his way to Diyar-Bekr there were fresh references to Ibrahim Pacha, who reached the Bay of Antioch in the 'Nile' steamer on the 20th; and as he must of necessity land at or near our camp, I felt, as it were, on the horns of a dilemma. On the one hand, his vexatious annoyances did not entitle him to a cordial reception from the Expedition, whilst one of an opposite kind might only increase our difficulties. Wishing to avoid Scylla as well as Charybdis, I had the means of saluting him quietly prepared, in case the Pacha should land at our station. Our state of suspense was not of long duration. We saw the barge leave the 'Nile' with Ibrahim sitting in the stern, but when almost at the entrance of the river, she changed her course, and proceeded to land the Pacha on the open beach about a mile to the northward of our camp. We afterwards ascertained that this sudden change was caused by his not seeing the guns manned, and by his belief, in consequence, that we did not intend to pay him the usual mark of respect of firing a salute.

He passes onwards, and is not saluted.

The 'Tigris' set up and floated.

Having a strong body of skilful workmen and ample means at command, the setting-up of the 'Tigris' steamer was soon accomplished, and she was launched on May 22, in the presence of numerous spectators. On the 30th her engines were not only set up, but she was ready to ascend the Orontes to Antioch with a cargo of bent plates belonging to the larger steamer, and thus make a good beginning with regard to the

* See Appendix IV. for Captain Estcourt's Report of his mission to Reschid Pacha.

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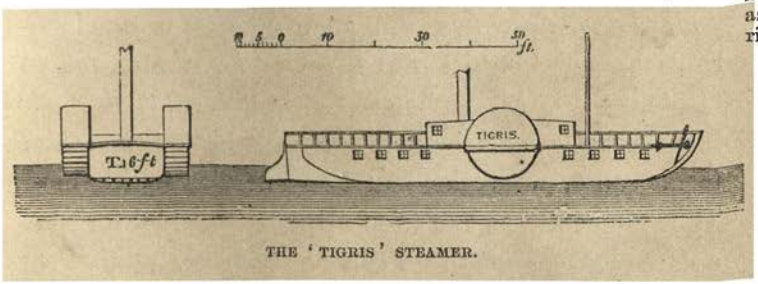
transport. She failed, however, to stem the current at the second obstacle she met with in her ascent, and

Fails to ascend the river.



THE 'TIGRIS' STEAMER.

we had the disappointment of seeing our little steamer returning with her cargo to the vicinity of the camp. After some additional attempts, it became but too clear that there was no hope of conveying the heavy materials by water to Antioch, and the 'Tigris' had to be separated into eight sections in order to facilitate her carriage across the country.

Building slips prepared.

During this interval a line of levels was being carried from Scanderoon to Bir; building slips were prepared at the latter place, with a defensible work, sufficient to give protection to our armament and materials. All these operations gave healthy occupation to our men, and kept up their interest in the Expedition. It soon, however, became apparent to all that the carriage of our heavy materials across the country must be attended with great and unexpected difficulties. Even if our steamer had had sufficient power to ascend against the current of the Orontes, the rocks in some places were not sufficiently covered, at this low season, to permit her passage.* The river, evidently, could only be made useful to a limited extent by means of extraordinary

* River-steaming was in its infancy when the 'Tigris,' the fifth vessel of her class, was built. One of the steamers now plying on the Thames would easily ascend the Orontes.

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exertions, and was totally impracticable for the boilers. Their conveyance by land, therefore, became imperative. But before describing our progress in this laborious undertaking, I must revert for a moment to Captain Estcourt's mission to Reschid Pacha. Not finding the Vizir of Asia at Diyar-Bekr, he followed him to his camp, where he had two interviews with him. The moment was not altogether favourable for our application, since the Vizir had scarcely established his authority in the district of Orfah, which had but just been given up by the Egyptians, so that there was much real difficulty in his taking any decided steps in our favour. He held out hopes of assistance, however, and gave a 'boyardhi' (or order) to enable us to obtain assistance from the local authorities in the Sultan's territory.

Capt. Estcourt visits Reschid Pacha.

The Vizir's assistance nominal.

Provided with this document, Captain Estcourt returned to Suedia by way of Orfah, Bir, and Aleppo, on June 26. Here a most difficult and laborious task awaited him in that portion of the transport service which was allotted to his superintendence. We had two serious undertakings before us—the construction of carriages strong enough to remove our ponderous boilers, &c., and the opening of a practicable road for a distance of 140 miles. The former was commenced with hearty goodwill, chiefly by our own artisans, whilst the latter fell to both officers and men, who were stimulated to their utmost exertions by the example of their commander (Captain Estcourt) and his zealous assistants, amongst whom Lieutenant Cleaveland, Messrs. Murphy, Charlewood, and Fitzjames specially distinguished themselves, and worked under the conviction that, come what might, they *must not fail.*

Construction of waggons, &c.

Lt Col. Estcourt 43rd L.I. del. G. Hawkins, Jun.r lith.

Day & Haghe Lith.rs to the Queen.

DIYÂR BEKR.

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Gradually our work crept on. Under the superintendence of Mr. Rassam, the Turcomans conveyed a large portion of our lighter materials and stores on their camels. Blanchard's pontoons and other portable things were carried by hand, by the people of Suedia, to Antioch. The conveyance of the keelsons was one of our greatest difficulties, for, owing to their length, they could scarcely pass the sharp turnings of the narrow roads, and it became all-important to float *them* at least up the Orontes.

The keelsons taken up the Orontes.

This task devolved upon one who was at all times ready to do his utmost to overcome difficulties, Mr. Charlewood. He formed these ponderous beams into a raft, firmly put together, took four seamen in one of the boats, and 30 natives to assist in dragging it over the most difficult places, and thus he commenced the ascent of the river. Owing to the strength of the current this was no ordinary task, even when there were no impediments to overcome; but in case of meeting either rapids, or one of the fishery weirs, it became necessary to separate the keelsons, and carry them one by one over the obstacle, whatever it might be. Four days of unwearying exertion took the keelsons up the river to the neighbourhood of Antioch, from whence Mr. Fitzjames had them conveyed to Gūzel Būrj.

The road commenced.

The people of the country were, naturally, quite unaccustomed to such serious labour, and this obliged us to employ at least three times the number that might have been necessary for similar exertions at home.

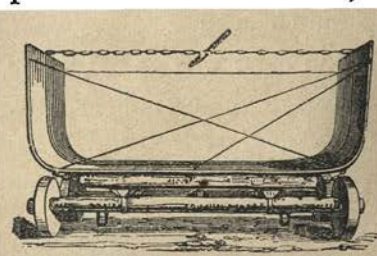
Towards the beginning of July some progress had been made with the road, and the preparation of

CHAP. X.

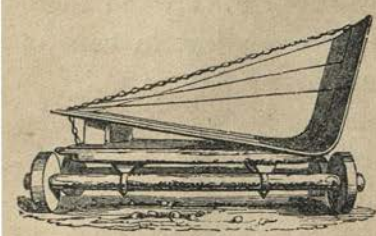
Occupations in the camp.

sledges and other vehicles was far advanced. Our camp had been the scene of extraordinary energy and activity. Timber—chiefly oak and elm—had been arriving almost daily from the forests on the slopes of the Beilan Mountains; iron, to supply our wants, was brought from Marash. Our force of carpenters and smiths had been increased by the constant exertions of Mr. Kilbie, our agent at Aleppo. For the weightiest portions of our materials, such as boilers, bed-plates, &c., very strong sledges were prepared and put on wheels.

The heavy weights.



MIDSHIP SECTION OF 'EUPHRATES' STEAMER.



SECTION OF 'TIGRIS' STEAMER.

Transport of the 'Tigris's' sections.

The next task in point of difficulty was the removal of the 'Tigris' in eight sections. These were mounted on wheels, and arrangements for the paddle-beams were made in the same way. The flat-bottomed boats were also put on wheels and dragged by land, while we endeavoured to assist them by spreading a sail. The result of our united labour was that our own artisans, with local assistance, were enabled to construct 27 available carriages, in addition to our 4 artillery waggons.

The large boat on wheels.

One of our contrivances was a low truck-carriage, on which one of our boats, which had formerly done good service, was placed. But her progress was so

slow over the plain, even with sails set and a favourable wind, that we were obliged to have recourse to

THE LAUNCH ON WHEELS.

animals to drag her as far as the Lake of Antioch, when she fell to the charge of our 'Admiral,' as Mr. Fitzjames was now constituted, after having completed his share of the transport service between Gūzel Būrj and Antioch.

City of Antioch.

This city, the modern Antakiyah, even with its mulberry-groves and fruit-gardens, covers but a small part of the ground occupied by the ancient city, though it still contains 14 mosques, a Mohammedan college, a synagogue, and several baths. The houses, which are of an inferior description, have tiled pent-roofs, and exterior staircases, corridors, and balconies, with a court below shaded by orange and pomegranate trees.

Its ancient gates.

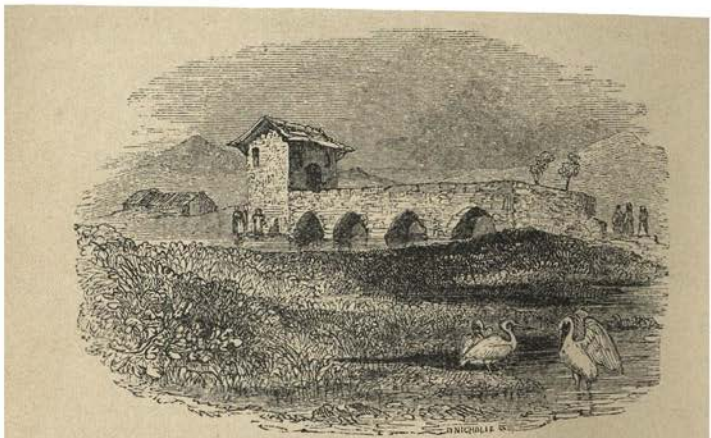
The most remarkable of the ancient gates are those of St. Paul and Bab-el-Jisr,* or Gate of the Bridge, which leads to the bridge over the Orontes. The population

* 'Expedition to Euphrates and Tigris,' vol. i. p. 425.

CHAP. X.

Walls of Antioch.

in 1836 was under 6,000. The walls of the ancient city, which are still comparatively perfect, have a circumference of about seven miles, and are nearly in the



JISR HADID.

form of a parallelogram, which to the SE. is bounded by a range of high rocky hills, and has on its north-western side the Valley of the Orontes. Walls and square towers of surprising solidity * once encircled this residence of the Syrian monarch, the 'seat of pleasure, and the third city of the habitable earth.' †

The Acropolis of the city.

At the highest extremity of this lofty range of hills is the Acropolis, from the eastern side of which, by a bold effort of genius, the wall has been carried down the almost vertical face of the cliff, and after crossing the valley this chain of walls has been made to ascend the opposite steep hill in a zigzag and extraordinary manner; after which, having again been carried across another hill, it descends in the same daring way to

* Josephus' Wars, lib. iii. 3, 4.
† Bochart Præf. 41.

the western walls at St. Paul's Gate. At the steepest parts of the hills these walls necessarily become a succession of gigantic steps between the towers, which at some places are close to one another, the walls being raised outside as a protection against the commanding ground beyond. Near the western extremity of the city are the barracks and also the newly-built serai of Ibrahim Pacha. The groves of Daphne, the translucent fountain of Zoila, and the remarkable pass of the Red Cliff, as well as other objects of interest, are in the vicinity of this once royal but now fallen city.

Groves of Daphne, &c.

In proportion as I became more fully alive to the consideration of the great difficulties which interfered with the prosecution of our undertaking through the country lying beyond the capital of Syria, I saw that I had made the serious mistake—though, perhaps, the only one—of husbanding too closely the public funds entrusted to me. Had I in the first instance *purchased* animals and all that we required, instead of trusting to the anxiety of the people to earn money by hire, &c., in which course I was mainly actuated by a desire to economise our supply, we should have been saved many of those annoyances and vexatious delays which will be in part the subject of the following pages.

CHAPTER XI.

TRANSPORT OF THE MATERIALS TO PORT WILLIAM, AND PREPARATIONS TO SET UP AND FLOAT THE STEAMERS AT THAT PLACE, WITH THE DIFFICULTIES AND OPPOSITION OFFERED BY THE MUTSELLIM.

CHAP. XI.

THE details of our proceedings after leaving the mouth of the Orontes until the completion and floating of our steamers on the Euphrates, in March 1836, must necessarily involve some repetition; and the narration of difficulties, which were so full of interest and excitement to us at the time, may now, it is to be feared, sometimes become tedious to the reader. Let it, however, be borne in mind, that in thus recording the trying difficulties met with in our transport service, the Commander is only endeavouring to do justice to the untiring exertions of his officers and men, whose persevering efforts were made at times almost against hope.

Lieut. Murphy's survey.

By the beginning of July Lieutenant Murphy had, with the assistance of Lieutenant Cockburn and Mr. Thompson, completed the survey of the coast-line of the Bays of Antioch and Scanderoon, &c.; and these officers were now commencing the laborious task of carrying a line of levels from the seacoast to the Euphrates, in order to ascertain the practicability of cutting a canal. The remainder of our force had a more serious undertaking before them, which was allotted to them in four subdivisions.

Dr J. Fitzgames R.N. del. T. Picken lith.

Day & Haghe Lith.rs to the Queen.

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Arrangement of the routes from Suedia.

The first division passed from the depôt at Suedia, over the most difficult spot which we encountered during the whole Expedition, and which was long known among us by its well-earned appellation of the 'Hill of Difficulty.' This part of the line, and as far onwards as Gūzel Būrj, fell to Lieutenant Cleaveland and Mr. Charlewood, who had also the assistance of Doctor and Mr. A. Staunton.

The second division comprised the navigation of the Lake of Antioch, between Gūzel Būrj and Mūrad Pacha, and fell to Mr. Fitzjames, who bore the title of 'our Admiral,' and no officer, even of that rank, ever did more to overcome difficulties.

The third division took the line onwards from the Lake of Antioch to Port William, on the Euphrates; and this portion was under the energetic direction of Captain Estcourt, who had the assistance of Messrs. Eden, Hector, and Rassam, besides that of some gunners of the Royal Artillery, under Sergeant-major Quin.

Agha Denghiz lake.

Thus the Agha Denghiz, or White Lake, became the centre of our future operations. We had one string of waggons and sledges to the westward in full work, under Lieutenant Cleaveland, and another (under Captain Estcourt) working the longer line between the lake and Port William. And whilst the most ponderous weights were thus conveyed by a combined operation from one place to another along the principal road from the coast to the lake, and thence on to the river, camels and mules, forming our fourth division, carried the lighter materials to their destination by a separate route, eastward of the lake. The camels were chiefly

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brought to us by the Turcomans, who after a time continued to serve us steadily, notwithstanding the opposition of Ibrahim Pacha.

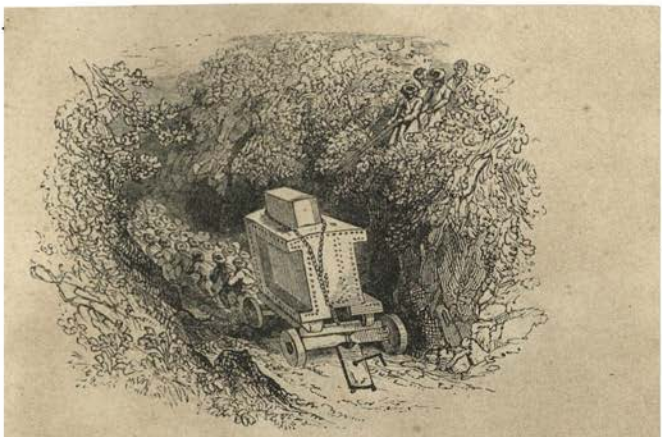
It was not with ordinary zeal that the men and officers grappled with the difficulties we encountered in making our way to the Lake of Antioch, some of which were *almost* insurmountable. It was, as I have already mentioned, at the end of our first stage from the camp at Suedia that we came to one of the most serious of them all—the 'Hill of Difficulty.' We halted on the afternoon of our first day's progress at the base of this ascent. We had four artillery waggons, twenty-seven waggons and sledges, which we had constructed on the banks of the Orontes, and numerous 'arabas' or carts of the country, with which to transport the steamers' boilers — the heaviest of which weighed seven tons—and all our ponderous materials. The task of reaching the crest of the hill commenced next morning, and required the assistance of all our men, and of every other available means.

Reach the 'Hill of Difficulty.'

A zigzag path having been made, we confidently expected that, with 40 pairs of oxen and 100 men to each sledge, the boilers might reach the crest of the hill one at a time, the whole of our available strength of animals and men being applied to each separately. But we soon found that the sharp angles and abruptness of the ascent made this all but impracticable: with less enterprise and perseverance on the part of the officers and men it must have been quite so. They were, however, fertile in expedients. Anchors were fixed firmly in the ground a little distance in advance, towards which the boiler was drawn by pulleys and

40 pairs of oxen and 100 men.

drag-ropes inch by inch; at certain places jack-screws were used to raise the sledge; and by these processes, tedious though they were, the summit was attained CHAP. XI.



BOILER ASCENDING THE 'HILL OF DIFFICULTY.

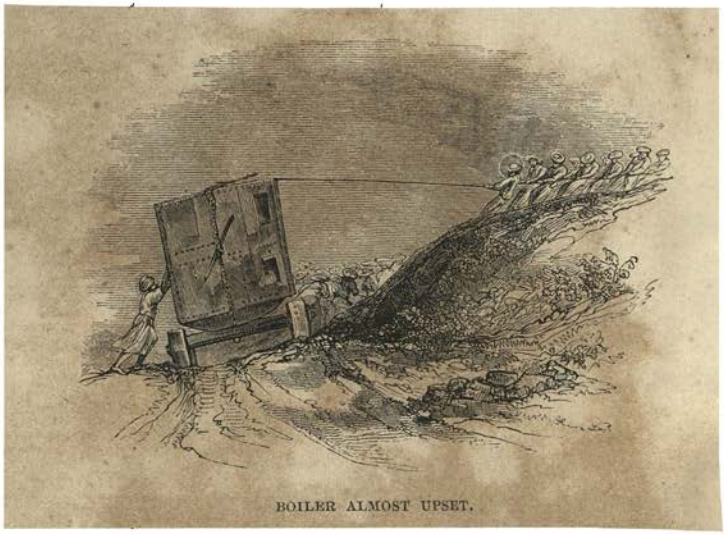
step by step. Of course these operations had to be repeated with each of our heavy weights; and when the difficulties of the ascent were at length happily overcome, the descent was attended not only with nearly as much difficulty, but with considerable danger also. By attaching well-manned drag-ropes behind each carriage, we managed, however, to lower them gradually down the steep ascent, till each one safely reached the level country below. One boiler was all but overturned during the ascent, and was in danger of going over the precipice. The ready pencil of Mr. A. Staunton has shown it in its critical position, with one native workman holding it up manfully with all his might, under the belief that his strength would be sufficient to avert the calamity. (See next page.)

Boiler almost upset.

The difficulties in conveying the boilers between

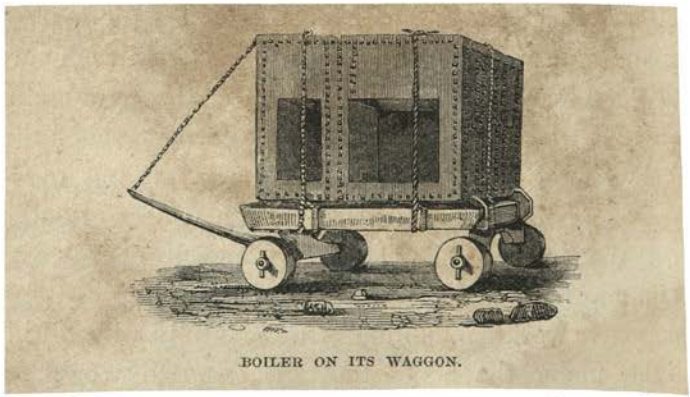
CHAP. XI.

Suedia and Antioch were peculiarly harassing, from the constant breaking-down of our carriages and other means of conveyance, which not only caused serious



BOILER ALMOST UPSET.

delay, but taxed the resources and ingenuity of the officers in charge to a painful extent. One of the heaviest boilers had been taken over some of the worst



BOILER ON ITS WAGGON.

ground at an average rate of about half a mile per diem, and was being dragged onward over a rough stony

Lieut. Fitz James R. N. del. H. Warren lith.

Day & Haghe, Lith.rs to the Queen

plain, by some 60 hired bullocks and as many men, when the truck came in violent contact with a large piece of rock, which caused the guiding-beam attached to the fore-axle to snap in two. This was a very serious accident, for if no timber could be had to replace the broken beam at once, the men and their bullocks would be sure to leave, and could not have been reassembled for many days to come.

Almost in despair, Mr. Charlewood, the officer in charge, proceeded to a lonely house close by, with the forlorn hope of learning where a beam might be obtained. He found the family quietly occupied with their morning meal, and quite indifferent to our difficulties. But when all prospect of assistance seemed to be at an end, he perceived that the roof of their dwelling was supported by a large beam, running from one end wall to the other. This was a most fortunate discovery, and no time was lost in making known to the owner, to his utter amazement, that we must purchase his house. A bargain was struck at once, to the satisfaction of both parties; and before the occupants had time to quit their dwelling, the sailors were at work stripping the roof and extracting the beam. Thus, within less than an hour of the breakdown, the boiler was supplied with a new guiding-beam, and was moving on towards Gūzel Burj, where water-carriage was substituted for that by land; and it fell to Mr. Fitzjames to convey the heavy weights across the lake to Mūrad Pacha, where the task of their conveyance onward to Port William devolved upon Captain Estcourt.

A beam taken from a house to repair the boiler.

These arrangements, diligently carried out, nearly cleared out our depôt at the Orontes in a short time;

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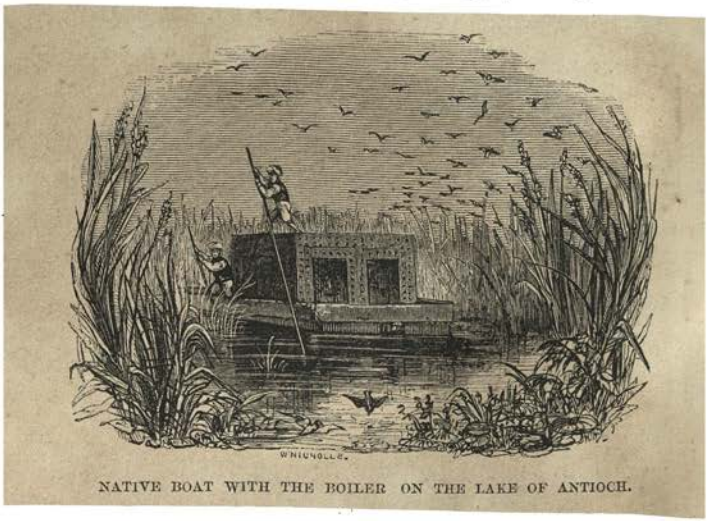
and I then organised a small caravan to convey the guns, small arms, and a large supply of powder for



NATIVE BOAT WITH THE BOILER ON THE LAKE OF ANTIOCH.

Port William now the centre of operations.

mining purposes, to our station on the Euphrates, and quitted our camp myself on July 10, and on the 18th reached Port William. This place had now, in its turn, become the centre of our operations, having on one side the line of transport, and on the other the preparations for the navigation of the river. Unremitting exertions had by this time accomplished a good deal of the former task, and by the middle of August our men and animals were no longer toiling between Suedia and the Lake of Antioch, on which our persevering 'Admiral' had also all but completed his task.

The brunt of the transport labour was now transferred to the line between Gūzel Burj and Port William, on which Captain Estcourt and Mr. Rassam were working assiduously and cheerfully, enjoying thoroughly the absurd incidents which often arose to enliven even their most serious difficulties. On one

occasion, at the village of Afrin, when our long team of oxen were struggling to drag the large boiler through its difficulties, one poor beast fairly laid down under the blows of its Turcoman driver. 'You lazy effeminate fellow,' shouted Achmet Bei, the commander of the Turcomans, 'make your beasts draw!'—'I effeminate!' retorted the indignant Turcoman, 'you shall soon see what *I* can do!' and seizing the poor ox by the ears, he pulled away so energetically to get him on, that he *pulled them out*, and taking them to Captain Estcourt, as a proof of his zeal, exclaimed, 'Who will dare to call *me* effeminate now?' These trophies were long preserved by Captain Estcourt. Nor was this a solitary instance of such an occurrence; another pair of ears were pulled out afterwards at the Sájūr and brought to us by an equally energetic Turcoman!

Turcoman energy exemplified.

An important step in advance had been made by setting up part of the large steamer, although under very unusual circumstances, for her keel and a large portion of her materials still remained at different places between the lake and their ultimate destination. But although much remained to be done, things were beginning to look more favourable, and towards the end of August a letter arrived from Sir John Hobhouse, President of the Board of Control, giving us the all-important intelligence that His Majesty's Government had made known to the Pacha of Egypt, that having undertaken the Euphrates Expedition, not only with his concurrence, but with the express sanction of the Sultan also, it must now be faithfully carried out.

Setting up the steamer.

The results of this strong remonstrance were immediate orders from Mehemet Ali to afford us every

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Result of remonstrances by British Government.

assistance. Presuming that he would not venture to give fresh umbrage to the British Government, our obstructions seemed to be removed; for with respect to the Turcomans, and the natives within the Sultan's territory, all had been smooth for some little time past. But our prospects had scarcely become brighter when other trials awaited our little force.

Casualties and sickness.

Constant exertions and exposure to an extreme climate had greatly augmented our sick list. Two valuable men, Corporal Geddes, of the Royal Engineers, and James Brown, an able seaman, died. At this time I was myself quite unconscious of anything that was going on, and yet a confused connection between our work and the wanderings of brain-fever possessed me. Out of consideration for my state, the riveting of the steamers' plates had been stopped; but it was soon discovered that the stillness greatly aggravated my fever, while the sound of eight hammers hard at work gave me immediate relief.

More funds available.

The first news that greeted my returning consciousness and convalescence, was that of the addition by Government of 5,000*l.* to the funds of the Expedition. This was most cheering, since it sufficed not only to repay the advances made on my responsibility by Messrs. Cox, but those of my friends Hampden Gledstanes and George Glas Sandeman also, and yet left 3,000*l.* in hand for the expenses of the undertaking. I had also the gratification of finding that the transport had been carried on with unabated energy during my illness, as well as the putting together of the steamer.

Depôts of coal established

Depôts of coal were now established at Deir and Anna, on the Euphrates, with reference to our

A. A. Staunton del.t

Fairland lith.

SOURCE OF THE RIVER BELLE.

approaching descent and survey of the river; while, at the same time, we took every pains to make the Arab Sheikhs understand that our visit was one of peace and mutual advantage. For the promotion of these objects, and to ensure a cordial understanding, I had proposed that Mr. Wherry, Consul at Aleppo, should undertake an explanatory mission to the Arabs. This, however, eventually devolved upon Lieutenant Lynch,* Mr. Wherry finding it difficult to leave his post for the purpose. Lynch set out on the 5th of September, accompanied by his brother, by the younger Staunton, and by Mr. Elliot, who had recently joined us.† The party proceeded in the first instance to Orfah, then to Haran, and, making their way through that district, passed along the river towards Deir. During this mission, which necessarily occupied some time, the exertions of the officers and men of the Expedition continued with unabated ardour.

Lieut. Lynch sent on a mission to the Arabs.

The line of levels carried on by Lieutenants Murphy and Cockburn and Mr. Thompson was approaching completion;‡ and though the Pacha's assistance was often more nominal than real, much was done notwithstanding, under Captain Estcourt's direction, in moving the heavy weights on to Port William. Thus, the bed-plates and cylinders were safely transported thither, though under very adverse circumstances, especially during the heavy rains, which had already commenced. While these various operations were

Line of levels across Syria.

* See Appendix V. for Lieut. Lynch's report.

† I had made Mr. Elliot's acquaintance at Bagdad just after his escape from the melancholy fate of Messrs. Taylor, Bowater, and their companions.

‡ This was, it is believed, the longest line of levels which had been carried out up to that time.

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being carried on simultaneously at different points of our line, our leading object of putting together the 'Euphrates' steamer was proceeding rapidly. As the different parts were brought up they were fitted into their places at once. The keel and stern were the last to arrive; but as soon as they were fitted in, the slips were prepared, and on September 26 the launch took place.

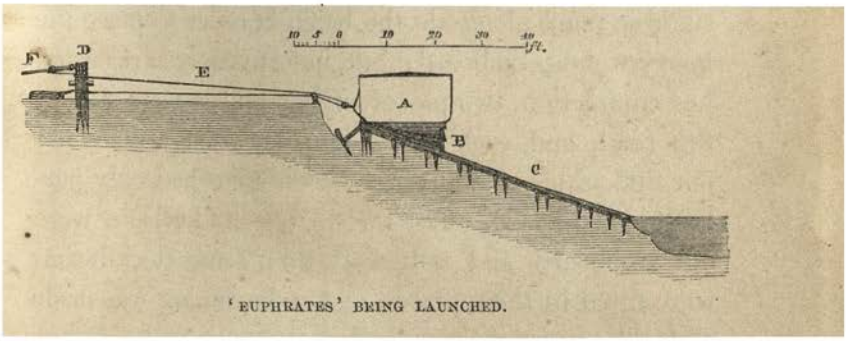
Progress in setting up the 'Euphrates' steamer.

M. Vincent Germain, who had only been deterred from joining the Expedition by the Pacha's hostility, was present as a visitor on this occasion, and was both able and willing to give useful advice, although Lieutenant Cleaveland's presence was, in fact, all that was requisite to ensure success.

Preparations for the launch.

The nature of the ground was such that it had been imperative to put up our vessel parallel to the river, and, as a necessary consequence, to launch her sideways. The banks at Port William are some twenty-five feet above the surface of the water; the steamers, therefore, had to be put together at that elevation; and it was necessary to prepare three slips—one near the bow, a second at the stern, and a third amidships—along which she was to be allowed to slide gently downwards, easing her off by means of one chain near the bow, and another towards the stern. These being ready, and the signal given, she slipped downwards, and, at first, as gently as could be desired; but when she had gone about a quarter of the distance towards the water, one of the chains stretched, and was evidently about to give way altogether. This was a very critical moment; but before there was time for the chain to part entirely, and thus permit the vessel

to make a fatal swing round and be thrown off the slips, Lieutenant Cleaveland, with admirable presence of mind, called to the men to 'Let go the other chain;'



'EUPHRATES' BEING LAUNCHED.

and being now unchecked, our vessel continued to descend with increased and, to us, alarming velocity, till she actually *leapt* into the river. Happily, she fell into the Euphrates in an upright position, and the impetus, as may easily be imagined, caused the water to fly upwards on each side. But all was perfectly safe, and the astonished acclamations of several thousands of spectators accompanied the (to them) wonderful sight of iron floating on the water.* The good people of Bir had, at the same time, the gratification of seeing the ensigns displayed of two nations which are so deeply interested in making the present link not only permanent but mutually beneficial. On this occasion the 'Euphrates' had the Union Jack at the bowsprit, the Blue Peter at her bow, the Arab flag on the foremast, the Turkish Crescent on the main, and the British ensign at the stern. The launch thus happily effected,

Launch of the 'Euphrates.'

* The Arabs at Bagdad afterwards translated a distich, which runs thus: —

'When iron floats on the water,
There is nought for the Arabs but dispersion or slaughter.'

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rejoicings, with moderate conviviality on the part of ourselves and men, followed this successful operation.

Next morning the 'Euphrates' was hauled to a suitable place alongside the bank, in order to place the heavy weights on board; but, unfortunately as regarded her completion, two pieces of her boilers were still on the road, and each succeeding day's delay increased our difficulties, although as yet the rains had only partially commenced. The bed-plates and keelsons were put on board and bolted down; some deck-beams were fitted in their places, and a beginning was made with the watertight compartments.

Letters from Bagdad.

On October 3 Seyd Ali Agha arrived from Bagdad, with letters from our Resident in that city to the various Arab Sheikhs along the river, urging them to give us every possible assistance.

Difficulties experienced.

In the course of this month, especially during its earlier part, much was done. The engines were nearly set up—the magazine and cabin were far advanced; but a great deal depended upon the goodwill of the local authorities, and it would be difficult to describe the petty annoyances to which Captain Estcourt, and the officers generally, were subjected by the withdrawal of the authority to obtain horses, camels, mules, &c. The difficulty of getting supplies was also increased; for avaricious officials sought, by all kinds of vexatious extortion, to get more money than was fair. Still all our little force worked on with unabated patience, cheerfulness, and a hearty unity, which was one of our greatest elements of success. The opposition of the Pacha of Egypt was at the bottom of all these difficulties; although this seemed to admit of some excuse,

Drawn by Lt. Col. Estcourt.

Day & Haghe Lith.rs to the Queen

ARAB ATTACK ON LIEUTT LYNCH & PARTY NEAR DEIR

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Political difficulties.

since a letter received at this period from Colonel Campbell, the British Agent and Consul-General in Egypt, assigned the hostility of the Porte to the Expedition as the cause for Mehemet Ali's opposition. No doubt the real explanation of all the hostility evinced, and impediments thrown in our way, would be found in the opposition of Russia to the establishment of a line to India by way of the Euphrates.

Be this as it may, we were still apprehensive of this system being continued, and our anxiety was increased by a report that Lieutenant Lynch and his party had been attacked and destroyed by the Arabs. We had a few days of most anxious suspense, which were ended by the happy intelligence of the safe return of the party to Aleppo, only one of their attendants having been disabled by a serious wound. The belief had somehow prevailed among the Arabs that Lieutenant Lynch's mission was in reality sent by Mehemet Ali with sinister objects; and this had caused a hostile feeling on the part of the Subha Arabs, a branch of the Aniza, who commenced their intended attack on their guests by wounding one of the party. The tact with which this serious affair was treated by Lieutenant Lynch, not only produced amicable relations with the tribe, but led to their rendering assistance to the Expedition; Lieutenant Lynch, with this object in view, allowing the affair of blood to remain as an unsettled claim between the Arabs and ourselves.

Lieut. Lynch's safe return.

Lieutenant Lynch brought from Aleppo two German travellers, Dr. and Mrs. Helfer, who came to descend the river with us. They proposed in return to render us really valuable services—Mrs. Helfer as a botanist,

Dr. and Mrs. Helfer.

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and the doctor by his knowledge of geology and other scientific subjects. This was therefore, in all respects, a very acceptable addition to our party, and the ladies' cabin being almost completed, we were able to give the necessary accommodation.*

Illness of Captain Estcourt.

At this juncture we lost the invaluable services of Captain Estcourt, whose health gave way under his unwearied exertions; and his illness necessitated a redistribution of work, to fill up the blank as far as it was possible. The line from the Sájūr river to Port William was now allotted to Lieutenant Cleaveland and Seyd Ali, who had recently joined us from *Bagdad*; that from the Sájūr to Azaz was given to Messrs. Hector and Rassam; while to Mr. Fitzjames fell the charge of the portion on from Azaz to Gindareez. Mr. Charlewood, assisted by Messrs. Elliot and Sader, undertook the line from Gindareez to Mūrad Pacha, the general superintendence having devolved upon Lieutenant Lynch, on his return from his mission to Deir. And, as it was all-important to convey the heavy weights before the rains set in, additional horses were purchased to the full extent that our remaining funds permitted, not doubting that the people would readily bring their bullocks to complete our task. Accordingly 50 men and twice as many animals being engaged, one piece of the boiler was, with the assistance of men and officers, placed on board the steamer on October 28. And on the 5th of the succeeding month, 72 oxen and 36 men brought in another piece,

Furtherance of the transport.

* Dr. Helfer was subsequently employed with reference to the cultivation of tea in Assam, where, most unhappily, he was murdered by the natives during his explorations. Our most agreeable travelling companion, Madame Helfer, is the present Baroness Nostitsch.

AZAZ.

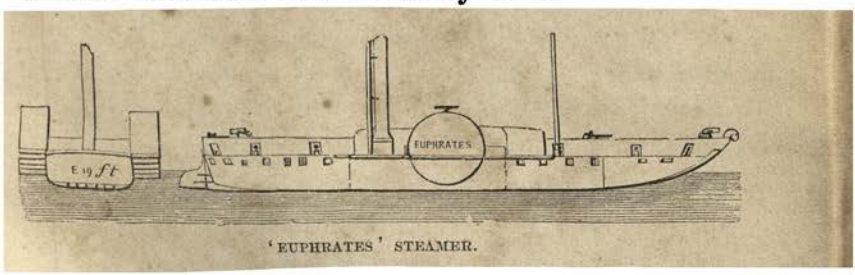
Mr. Fitzjames, R.N. del.

Day & Haghe Lith.rs to the Queen.

CHENDEREEZ.

although with increasing difficulty, owing to the rains. These appeared to have now regularly set in, while fresh and unexpected opposition from the Turkish authorities augmented our impediments. The Mutsellim of Bir, whose opposition had hitherto been underhand, became openly hostile. Either from his wish to pay his court to the rising star in Egypt, or from some other motive, he ordered his people to withhold that assistance in men and animals which had now become more than ever necessary to us.

Opposition of the Mutsellim of Bir.



'EUPHRATES' STEAMER.

This considerably crippled our powers. Still we managed to continue the transport more or less with our own men and horses; while the advanced state of the 'Euphrates' steamer permitted us to commence the 'Tigris,' and her three sections were set up, that they might be again riveted together. The whole of her materials being comparatively light, with the exception of one very ponderous piece of boiler, were conveyed by waggons and camels. In the hope of escaping the increased difficulties caused by a flooded country, every nerve had been strained to get all brought into the station before the rains came on; every man and animal toiled to the utmost extent of his powers—but it was all in vain!

The rains finally set in before our task was accom-

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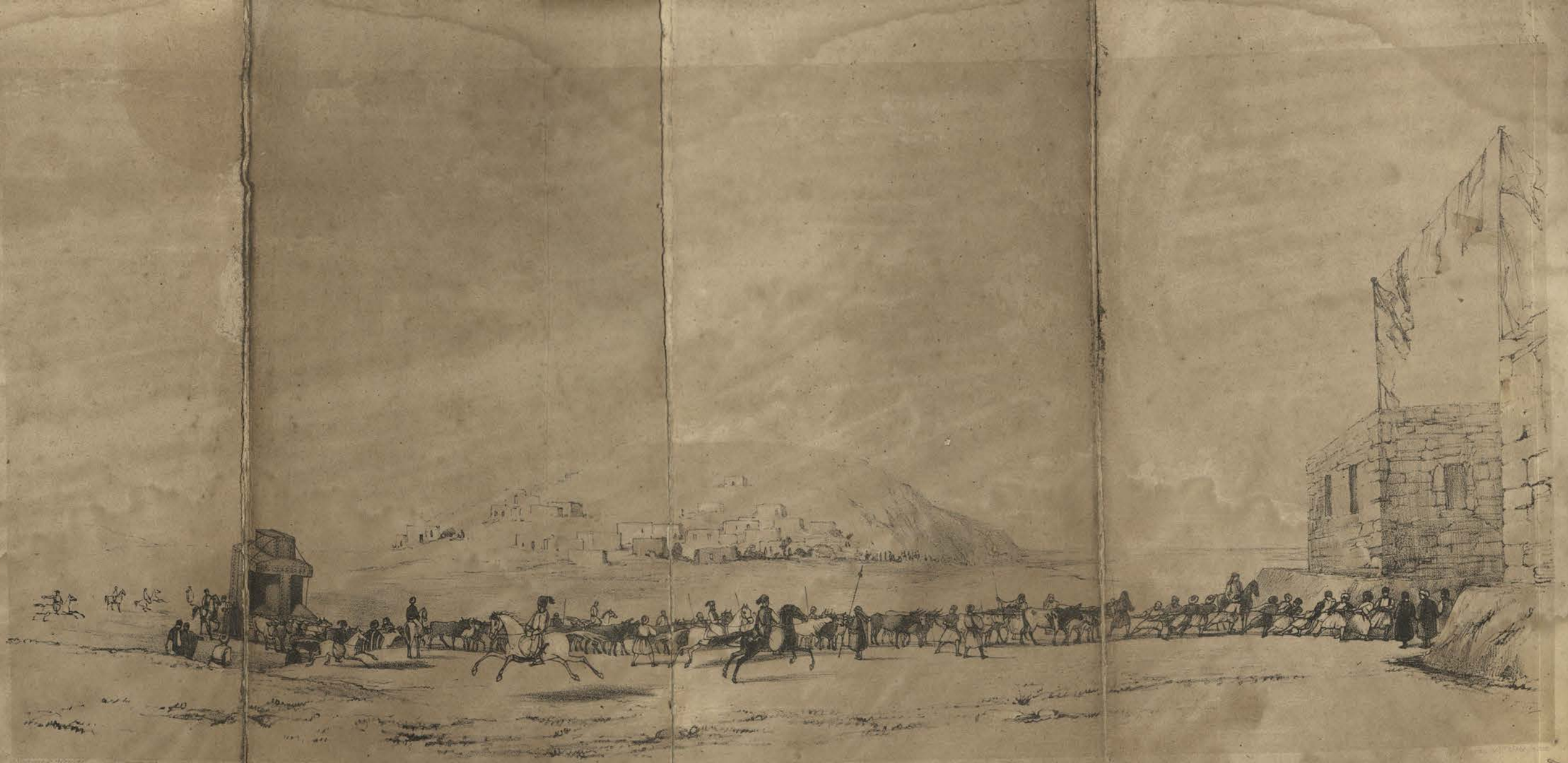
plished, and towards the middle of November, Lieutenant Lynch proposed a cessation of the transport until the spring. Some little respite would, no doubt, have been desirable for the sake of all concerned, but, for many reasons, I felt that intermission of any kind must be quite a *last* resource. The engineers and boiler-makers had already given notice that their time was nearly up; and even if they could have been induced to remain, the consequent additional expenditure would have been a very serious consideration, so that, on this account alone, total inaction for the rest of the winter was to be avoided if possible. I therefore determined to make every effort to extricate the remaining heavy weights from their marshy bed. With this object, I forwarded a supply of planks to Lieutenant Lynch, and suggested that by moving them in succession from the rear to the front of the carriage, we might create a plank road as we went along, and thus pass over the worst ground, promising my personal assistance as soon as I should have sufficiently recovered my strength.* I soon had the satisfaction of learning that the boiler's sledge was on its way to the station with its ponderous load, while Lieutenant Cleaveland continued his portion of the work with his wonted unshaken perseverance.

Efforts to overcome the flooded country.

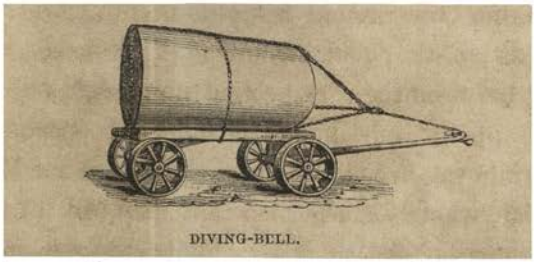
On December 1 another piece of boiler was safely brought into Port William by Mr. Hector, whose crowning achievement was the recovery of the diving-bell, which, having been overtaken by the rains, had been fairly lost in a sheet of muddy water, till its position was ascertained by means of bamboos used as feelers. Having discovered its whereabouts, Mr.

The diving-bell recovered.

* I was then recovering from fever and ague.



Hector caused it to be rolled out of the water by means of poles, placed on a sledge, and drawn by bullocks to the station, where it was received with lively



DIVING-BELL.

satisfaction, and a due appreciation of his successful perseverance.

The opposition of the Mutsellim of Bir having relaxed in some degree, our efforts, aided by liberal payment, procured such a force of men and animals, that on December 9, our heaviest piece of boiler, drawn by 104 bullocks, assisted by 52 natives and all our own men, passed under a triumphal arch into Port William, amidst a discharge of rockets and petereros, and the shouts, rejoicings, and congratulations of our party, who now saw a termination to our long-continued and anxious labours. One individual felt disappointment instead of pleasure. The Mutsellim of Bir had confidently expected that the deep mud in which the boiler lay imbedded would have rendered its removal utterly impossible, and now he beheld the last and most serious of our difficulties happily overcome!

Last boiler of the 'Euphrates' arrives.

Our large steamer was now fast approaching completion, and but few pieces belonging to the 'Tigris' remained on the road. To form depôts of fuel along the river, and make arrangements for the coming survey and descent, would now have been all

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that remained to be done, had the Egyptian and Turkish officials been honest in giving their assistance. True, they had received orders to give us every aid; but as neither Government really desired the success of the Expedition, they took advantage of the neutral ground lying between their respective frontiers,* and used it to disappoint our hopes as much as possible. Our materials were readily conveyed as far as the Egyptian frontier, where, on the plea that they had no right to take them farther, they were allowed to remain. And there they would have remained until now, had no other than the local means of moving them on been found. But by the use of our own horses and men, and by the partial adaptation of camels to purposes of draught, we managed to do without the natives, and conveyed our materials into the Sultan's territory, where we had a right to demand assistance. Finding himself foiled, our old enemy, the Mutsellim, caused our horses to be turned out of the village, forced the carpenters to leave their work and return to Bir, withheld our supplies of bread from that town, and took the more decided step of searching our station for 2,000 muskets, which he alleged had been brought by us with some sinister design.

Reduced almost to our own resources.

These extraordinary proceedings caused me to apprehend that the seizure of our vessels was intended; and the thought passed through my mind, that, in such an event, our amply-supplied magazine provided me with the means of leaving him nothing but the fragments of what had caused us such toil. When, however, my irritation calmed down, I saw reason to believe that

* This was a distance of barely five miles.

the Mutsellim's conduct, as well as that of Mehemet Ali himself, were not likely to be sanctioned by the Sultan; and on representing the circumstance to the Porte through Lord Ponsonby, this man was immediately dismissed, and a more favourably disposed successor appointed, while our preparations were quietly resumed.

At one time during our difficulties, the immediate descent of the river with the larger vessel *only* seemed desirable, leaving the 'Tigris' to follow on her completion. But the expected addition to the sailors from England, to replace the men who had perished, as well as the great advantage of having a second steamer in case of any untoward circumstance, caused this hurried descent to be abandoned. The new Mutsellim also gave us such limited assistance in workmen as we still required at the station; and the Egyptian Government having become more favourably disposed towards us, I turned my attention to the important object of a supply of fuel, and arranged a journey into the neighbouring part of the Taurus, with a view to the solution of this question.

CHAPTER XII.

SEARCH FOR COAL AND NATIVE STEEL IN THE MOUNTAINS NEAR MARASH—ASCENT OF THE STEAMER TO THE TOWN OF BIR.

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WE had heard that coal had been found not only in the country to the westward of our station, but also on the banks of the river below Port William, where it was described to us as a coal of greyish-white colour. This we decided to leave until our descent of the river, and, hoping that two of our invalids, Messrs. Murphy and Ainsworth, might be benefited by the change, as well as myself, we left Port William on January 9, taking with us only one other effective individual, Mr. A. Staunton. Proceeding to Aintab, and from thence to Killis, we crossed the Beilan chain to Scanderoon; whence we sent some of our workmen (whose engagements were completed) to England, and commenced our exploratory journey.

Beilan chain.

Battle-ground of Issus.

After going over the Issic plain, its battle-ground, and other places of interest, we continued our journey along the Jihūn * to Missis, and to Adana,—thence to Tarsus, where we were hospitably received by the family of the French Consul, M. Gilet, whom we found engaged in excavating some very singular remains near the town. These consisted of massive walls in the form of a parallelogram, within which, at either end, was a solid square block of masonry,—while two

Tarsus and its ancient temple.

* Jihūn, or Jeharson, the 'River of the World.'

G. Barnard, lith. from a drawing by Lieut. J. Fitz James, R.N.

Day & Hughe Lith.rs to the Queen.

ISKÉNDERÚN.

transverse and very substantial lines of masonry crossed this parallelogram at its eastern extremity. M. Gilet, however, in this case failed to find anything like an interior chamber, the whole consisting of masses of masonry, which most probably originally formed part of some kind of temple.

Passing onward from Tarsus through a district of tertiary rock, we visited the extensive but imperfectly-worked lead-mines of Kule Boghaz, which occur in limestone of the cretaceous series. After an unsuccessful attempt to find the expected coalfields, we resumed our journey along the abutments of the Taurus, in the direction of Sis. The people on this line have so bad a name, that our *mukero* (muleteer) refused to take us by the direct route, and we had immediate proof of his correctness, by a shot which was fired at us as we approached the neighbouring village. Shortly after this proof of illwill, Mr. Ainsworth and I, when looking for francolins, found that we had lost the rest of our party; and after attempting for some time to find them, we ultimately determined to proceed onwards, following the bearing which had been given us of north 72° E. We passed through a very picturesque country, and having forded the River Jihūn, arrived at the village of Utchinga soon after dark, where we were treated to a scanty supper and one bed, without any tidings of our missing companions. Long before daylight we moved onwards in the same direction as before, and reached a village called Guesiche. On enquiring for the lost Franks, we were conducted to another house, where we found a bright fire, but not that of our attendant

Kule Boghaz lead-mines.

We lose our party.

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Malta. The master of the house led us upstairs, where, instead of our own party, we found five strangers asleep. We therefore hastily retraced our route, passing a Venetian tower; and after making unsuccessful enquiries at the village of Doorac, we reached, in the afternoon, the large square building, inhabited by the local chief of the district, Belemange-Ogloū. Here we had a meal of thin bread-cakes, with pomegranates and water-melons, &c.

Village of Doorac.

Enquiries for our party put us in communication with a Russian doctor, who only knew a few words of Turkish in addition to his own language. Therefore, after some ludicrous attempts to get some traces of our missing companions, we had recourse to the Bei himself; from whom we found, to our serious disappointment, that a guide could only be obtained to Adana, and *not* to Sis, which lies in the opposite direction. There seemed no alternative but to proceed: keeping therefore to our guiding 72° East, we passed over a succession of wooded shoulders, and through picturesque valleys, halting for refreshment at the village of Buschoff, and later in the day at Boomgush, where, to our surprise, the people refused payment for their hospitality. We put up for the night at Solacle, where we met with very different treatment, for a francolin, cooked by ourselves, was all that fell to our lot. Next day we followed the course of the Jihūn, through very fine scenery, to Faquela Quoi, where, owing probably to the want of an interpreter, a cold room and scanty fare were all that we could obtain, which treatment naturally increased our anxiety to reach Sis; indeed, we felt sure that we could not be

Faquela Quoi.

very far from this town, unless our bearings were incorrect.

We obtained a guide for a short distance the next morning, although not without considerable difficulty, and were ferried over the Jihūn, proceeding parallel to its left bank in what we supposed to be the direction of Sis. Early in the afternoon we fell in with some labourers, who told us that this town lay at the foot of the Carlo Tagh. The very remarkable peaks of this mountain now guided our steps. We passed one or two reed-built villages, and halted for the night at Mosolū, a collection of huts, in one of which we obtained sorry accommodation amongst a crowd of *catergies* (muleteers), who had also halted with their animals for the night. Unable to procure a guide, we resumed our journey towards Carlo Tagh in the morning; and at noon, on reaching an extensive Turcoman camp, we had the great satisfaction of finding that our bearing had been quite correct. Cheered and encouraged by this certainty, we pressed on through an opener country, looking out anxiously for some marked object in addition to Carlo Tagh; but none appeared till late in the day, when we descried, at the distance of some 20 miles, a stupendous conical rock rising from the level ground, which might, or might not, prove to be Sis. The plain over which we were passing was intersected by the affluents of the Jihūn, two of which we forded; still, there was no appearance of any town. But, on crossing the bridge over the main branch of the Jihūn, and rounding the rocky eminence which had latterly guided our steps, our toil and anxieties were ended, by finding ourselves actually entering the town of Sis.

Guided by compass.

Onward through wooded mountains.

Arrive at Sis.

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We sought and found hospitality at the Convent of the Armenian Patriarch, and were most thankful for the frugal supper provided for us; but still there was no news of our party. Later in the evening, however, we learnt that they were at Sis, in another part of the town; and on hastening to their quarters, their welcome, and the good supper prepared by Malta, made up not only for our scanty meal at the convent, but also for our privations during the four days, during which we had made a journey of about 125 miles. We could say and feel, with Horace, that past dangers became pleasures. On comparing notes we learnt that our party had remained a whole day at the place where we had missed them, and failing to find any trace of our route they continued theirs to Sis; but as they were behind us, and took another line, there was no chance of any tidings of them short of Sis, which they had only reached the day before we did.

Join our party.

Sis is the seat of the Armenian Patriarch, whose palace is in the town, and it derives much of its importance from its being the centre of the three archiepiscopates of Turkey. The town contains about 1,000 houses, which are built round the remarkable rock already mentioned, which rises nearly 1,000 feet above the plain. This curious position has been castellated and strengthened with more than ordinary care, and its works indicate that this has been done at two different periods—the earlier one having had reference to bows and arrows only; the latter consisting of walls flanked by round towers, and adapted for musketry.

The town of Sis.

On the eastern side of this isolated hill is a spacious natural cavern full of stalactites, which have a rich

purple or rather crimson tint. A few miles from the modern town of Sis are the remains of the ancient city, now called Kara Sis, or Black Sis. Its principal feature is a remarkable castle, on one side of which a succession of cut-stone steps rise to the very summit of the hill. We devoted the following day to the ruins of Ain Zarbah. Its castellated remains are a few miles to the eastward of Sis. They have an imposing appearance, occupying, as they do, the steep slopes of a lofty rock on the banks of the Pyramus, and the cut-stones are here still sharp and fresh. The crest of the hill is reached by steps cut in the rock; it would otherwise be quite inaccessible. The ruins at its base consist of a square enclosure with a triple line of defence, containing temples and other remains.

Ain Zarbah.

From Ain-Zarbah we made our way to an adjoining Turcoman camp, where we received scanty hospitality, but were allowed to pass the night, and the next morning we traversed the alpine and wooded scenery of the abutments of this part of the Taurus. One night was spent in a small hut, built of hurdles and partially flooded, in the Turcoman village of Adjain Oglū Byad-Fuquoie. The following night we reached Zootale, a neat Armenian village containing stone-built houses, snugly placed in a hollow on the mountain-side.

Turcoman camp.

Hurdle-built village.

The scenery continued strikingly bold, and was varied by two fine waterfalls, and by the junction of the two branches of the Jihūn some 500 feet below us, while beyond this appeared a village, looking as if suspended over the water. Near this the ground became so difficult that it was necessary to unload our animals and carry our luggage across it; later we forded the

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Sleep in goatherd's hut.

Anabat Sū, and light beginning to fail we were glad to seek shelter from heavy rain in a goatherd's hut on the mountain slope, which was already so filled by a flock of kids, that in order to admit us the shepherds had to remain outside all night smoking their pipes. We rewarded them next morning for their kindness and their supply of milk, and proceeded on our way.

Neither of our hosts was willing to act as guide, and we had to get on as best we could with the Dūrdūn Tagh before us. The mountain scenery was extremely fine, occasionally diversified with cascades as far as the castle and village of Anabat. Thence we continued our route through the village of Dūngala, and descending through deep snow we arrived, after many difficulties, at the village of Fank, where we thoroughly enjoyed the luxury of a good fire to dry our wet clothes. Our path still lay along the side of the wooded mountain, at a considerable elevation, and ere long it became almost impracticable; the baggage horse missed his footing and slipped down the declivity, till his descent was fortunately arrested by a tree, where he remained, with his legs on each side of it, suspended over the edge of the precipice. We managed to unload the poor fellow, and prepared to rescue him by means of the ropes attached to the baggage, with which we hauled him up to the pathway, never expecting that he would be able to move: to our surprise, however, he was almost unhurt, and did his work as well as usual.

Dūngala village.

We now retraced our steps to Dūngala, in order to find a more practicable road, and the next morning resumed our journey. A steep and difficult descent led us down to the Kurolū-sū, which we forded above its

junction with the Jihūn; then, touching a bend of this river, we followed a mountain pathway till we opened a more practicable pass through the Taurus, which brought us to Marash, where we were conducted to the very quarters I had formerly occupied in that city.

Reach Marash.

Here the satisfactory intelligence awaited us that rapid progress was being made with the 'Tigris' steamer, and that, owing to recent orders from Mehemet Ali, our few remaining materials and stores were no longer to be allowed to remain in the territory which had been disowned by both the Sultan and the Pacha.

Marash had been an important place to us, our supply of timber having come from its surrounding forests. Iron, plumbago, and native steel are also found in its neighbourhood, but our expectations of coal were disappointed, and here our search for it ended. Lieutenant Murphy and Mr. Ainsworth set out for Samsat to connect that place by triangulations with our station, and I started alone and on foot for Port William, full of the prospect of immediately commencing the long-delayed descent and survey of the Euphrates.

Return to Port William.

Taking the route of Rūmkalah and Orum, I reached the station on the evening of February 24, where I had the inexpressible pleasure of finding everything in a most satisfactory state. Lieutenant Cleaveland, Mr. Eden, and Seyd Ali, with the local assistance, which was now, for the first time, given heartily, were approaching with the last heavy portion of the 'Tigris.' Lieutenant Lynch and his brother were employed in making some necessary purchases at Aintab. Captain Estcourt, his brother Mr. William Estcourt,* Messrs. Fitzjames, Staun-

* The Rev. William Estcourt, of Newnton Rectory, Tetbury, Wilts.

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ton, Hector, and Rassam were at the station, and their work almost finished. Indeed, we scarcely now required any assistance from Mehemet Ali, whose vexatious thwarting and opposition terminated when all difficulties had been overcome by our own perseverance. Our last heavy weight, the 'Tigris' boiler, reached the station on February 27, drawn by 104 oxen, with 52 native drivers to give them assistance, as well as all our own men, and it entered Port William under a triumphal arch formed of the flags and ensigns of both the steamers. It was the last of our difficulties happily overcome, and as such was greeted by a discharge of guns and rockets, while three hearty cheers proclaimed the completion of our herculean task.

Last boiler brought in.

While the bulwarks of the 'Tigris' were being prepared, the time was well employed by Lieutenant Lynch in connecting the river below Samsat with our station. The line of levels was also completed by Mr. Thomson; and the measurement of a base-line for the approaching survey was carried out by Captain Estcourt and Mr. Murphy, as well as the pendulum experiments. Our numbers were also completed at this period by the arrival of two sappers and four men from the 'Columbine,' and the following distribution of officers and men was made for the approaching survey and descent:—

Line of levels, and survey, &c.

Allotment of Officers and Men to the 'Euphrates' and 'Tigris' Steamers, the Commanding Officer being alternately in each steamer:—

'EUPHRATES.'	'TIGRIS.'
Capt. J. B. Estcourt, 43rd L. In.	Lieut. H. B. Lynch, Indian Navy.
Lieut. R. F. Cleaveland, R. N.	Mr. H. Eden, R. N.
Lieut. H. F. Murphy, R. E.	Lieut. R. Cockburn, R. A.
Mr. E. P. Charlewood, R. N.	Doctor Staunton, R. A.

'EUPHRATES.'

Mr. J. Fitzjames, R. N.
Mr. William Ainsworth.
Mr. C. Rassam, Seyd Ali. } *Interpreters.*
Mr. Thomas Hurst, *Engineer.*
Dr. Helfer, Mrs. Helfer. } *Passengers.*

'TIGRIS.'

Mr. A. Staunton.
Mr. W. T. Thomson.
Mr. William Eliot, J. Sader. } *Interpreters.*
Mr. Andrew Clegg, *Engineer.*
Lieut. R. B. Lynch, Indian Army. } *Passenger.*

Sergeant-major William Quin, R.A., *Storekeeper and Master-at-Arms.*

Acting Sergeant R. Clerk, R. E., *Carpenter.*

Sergeant Sein, R. E.
Corporal Gidens, R. E.
Gunner Hughes, R. A.
Gunner Gregor McDonald, R. A.
Gunner Charles Campbell, R. A. } *Miners.*
Gunner Edward Andrews, R. A.
Gunner Job Vaines, R. A. } *Smiths.*
Gunner David Ewart, R. A.
Corporal W. Greenhill, R. A., *Assistant to* Lieut. Murphy.
Corporal William Black, R. E.
Corporal W. Blash, R. E.
Private Edraton, R. E. } *Assistants to the Engineer.*
Private William Edrington, R. E.

Bombardier Thomson, R. A.
Gunner Harrison, R. A.
Gunner Robert Turner, R. A.
Gunner James Hay, R. A. } *Miners.*
Gunner Thomas Jones, R. A.
Gunner Gosling, R. A. } *Smiths.*
Gunner John Waddell, R. A., *Trumpeter.*
Corporal Benjamin Fisher, R. E.
Private Archibald McDonald, R. A. } *Assistants to the Engineer.*

Seamen.

William Frew, *Carpenter.*
Thomas Jones, *Quartermaster.*
Thomas Phipps, *Boatswain.*
John Haigh, *Sailmaker.*
Thomas Phillips.
George Davies.
Thomas Hunter, Jun.
William Denbigh.

Elias Lowrie, *Quartermaster.*
Benjamin Gibson, *Boatswain's Mate.*
Thomas Hunter, Sen., *Sailmaker.*
Thomas Booth.
Charles Nash.
Thomas Batty.
William Benson.
George Liddel.

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'Euphrates.'	'Tigris.'
David Raerdon.	Dubek Sacho.
Franklin Hofman.	Giacomo, *Cook and Baker.*
John Malta, *Steward.*	Vecenzo, „ „
John Waters, *Cook.*	Antoni, „ „
Hadji Mahomed.	James Whittaker, *Boiler-maker.*
Brown, John Clarke } *Seamen.*	

Mr. John Bell* left in charge of Port William.

A flat-boat, more like a raft indeed than an ordinary boat, had been built in order to deposit a supply of coal in advance of the steamer; and our preparations being thus completed, our vessel was put in motion for
Trial-trip. a trial-trip to Bir on March 16. On this first attempt the engines failed to do their work, but a more satisfactory trial was made the next morning. About midway between Port William and Bir an island leaves only a narrow channel on its western side, and the current being rapid at this spot, Mr. Fitzjames and a few men were landed on the island, provided with a hawser, to guide the vessel in case her rudder should fail to act at this critical place. Thus prepared, the 'Euphrates' passed into the opener part of what were now *her own waters*, at full speed, and displaying the British and Turkish ensigns, she saluted the castle and town of Bir as we approached. Our 21 guns, in honour of the Sultan, were duly returned by such artillery as the place afforded, and the scene altogether was most animated; for the walls of the town, as well as the surrounding chalk hills, were covered by the population, old and young. Our intercourse with the

* Mr. John Bell afterwards went to Abyssinia, where he entered the service of Theodore, and was killed whilst defending the king against assassins.

The steamer ascends to Bir.

people before we returned to Port William gave us some idea of the surprise which the ascent of the steamer against the current had caused them. There was no idea in this part of Asia that iron could be made to float; therefore, until actually in motion, it was believed that the steamer must be resting on the bottom of the river. Once off, however, and stemming a rapid current, their astonishment knew no bounds; 'ten Englishmen,' they said, 'could take their town,' and they declared that the fact of our having immolated two Turks on board had given us this supernatural power. It was owing to this power, they asserted, that one child had fallen upon another from the top of a minareh without any injury to either.

Last day at Port William.

Having given the good people of Bir an opportunity of visiting the steamer whilst lying opposite to their town, we returned to our station in order to make our final preparation for the descent and survey of the great river.

CHAPTER XIII.

DESCENT AND SURVEY OF THE RIVER EUPHRATES FROM PORT WILLIAM TO ZELEBI.

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Our steamer quite a success.

IN the short ascent and descent just accomplished, we had a practical proof that our steamer promised to realise Mr. Laird's expectations, and this trial had given us every hope that she would be equal to all that would be required of her during the almost untried navigation of the great river.

The inspiriting scene at Birejik, and the conviction that we had taken the first step in extending those commercial relations which Great Britain has so long maintained with her ancient ally the Sultan, gave us a feeling of confidence in our success, which was shared by our whole party. We descended the river to a suitable halting-place a little below Port William, and with somewhat reduced speed, and every precaution, we passed along the bold chalk hills on the Mesopotamian side, at the rate of 13 or 14 knots per hour, leaving behind us that double stream of broken water with which we have been familiar since 1814, when the first river-steamers were introduced on the Clyde and Forth.

Surprise caused by the steamer's locomotive power.

To the people of this part of the East, however, the powers of steam were utterly unknown. After their usual exclamation of 'God is great!' they compared the magical propulsion of the vessel to a gigantic

arrow, 'driven' (they said) 'through the water by a supernatural power, throwing one half of the river on this side, the other on that.' Their excitement was beyond description, whilst we, as we approached our anchorage, were quietly dining in the cabin with some friends who had done us much service; and thus closed this eventful day, which formed the one bright spot between the toils and trials of the preceding eleven months, and those which were still to be met during the further progress of the Expedition.

Projected survey.

We proposed to carry on the descent and survey of the river simultaneously as follows: the longitudes and latitudes of the principal points were to be determined by Lieutenant Murphy: a chain of triangles was to be carried along the river by Captain Estcourt, and a map of the country laid down by him also: and the river was to be most carefully sounded and examined. We had also to decide where depôts of coal should be placed: these practical arrangements occupied our first evening. The next day was one of most active employment. At an early hour Lieutenant Cleaveland and Mr. Charlewood started to survey the first portion of the river. Mr. Fitzjames was preparing to raft coals for the use of the steamers. Lieutenant Murphy was engaged in determining the astronomical points, whilst Captain Estcourt continued the survey, with his wonted energy, in order to map the country from Bir to Beles.

A feeling of confidence prevails.

The prosecution of these important objects by isolated and almost unprotected parties on the water may appear to have been almost too hazardous, but in no one instance was any anxiety or reluctance felt by any one of those so employed. Constant intercourse by

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night and day with the people of the country, during eleven months, had removed any feelings of uneasiness which the officers and men might at first have entertained. I was probably less free from anxiety than those under my command, remembering, as I did, the treatment which I had formerly more than once experienced from the Arabs; though at the same time the fact that no temptation of arms, stores, or even gold, had in any one instance induced them to break faith with us since we landed, seemed to justify my present confidence in them; besides, instead of having to deal, as formerly, with a solitary individual, we were now well-armed, and accompanied by a strong and to them a mysterious if not a supernatural power.

Steam appears a supernatural power.

The sudden appearance of a strange machine cutting through the water, and moving against wind and current from one centre of operations to another, could not fail to impress the minds of a superstitious people;—we felt that, in descending the river under these novel circumstances, we ran no kind of risk, so long as the prestige of our supernatural powers remained in full force. I should mention that we were commencing the survey with only one steamer, the 'Tigris' not being yet sufficiently advanced to accompany her consort.

The steamer resumes the descent.

Our progress the next day was not propitious. After going on favourably for some hours the steamer ran aground, and that so firmly that it became necessary to lighten her to get her afloat. Before that could be accomplished a violent storm of thunder, lightning, and rain came on, and continued without intermission for nearly three days. It was not until March 22 that

the descent was resumed, and we reached a place remarkable from the passage which the river here forces for itself through a barrier of difficult hills. This spot is the whirlpool of Gourlou, and close to it the river makes a bend almost at a right angle as it passes a perpendicular mass of rock. It was with some anxiety that we approached this singular spot, although we had the advantage of Mr. Charlewood's previous examination of its difficulties, as well as of the thoughtful action of Captain Estcourt, who, as we neared the dangerous spot, appeared on the crest of the rocks, waving his hat to warn us to keep clear of the whirlpool. We found this far easier to do than we had anticipated; the vessel answered her helm most perfectly at the critical moment, and we brought up below the village of Gourlou, to which the coaling raft followed, amidst the exclamations of wonder of the people.

Passing the whirlpool of Gourlou.

Next day the boats surveyed the river as far as the picturesque castle of Jerabolis, whither the steamer and raft followed them immediately. Here we found a supply of coal, which our horses had brought from Port William, and received at the same time the satisfactory intelligence that the 'Tigris' was almost ready to join us.

Jerabolis.

In the neighbourhood of Jerabolis, we met the Shook, a tribe of Arabs who are still armed with the primitive weapons of slings and huge clubs. At first they approached us with a feeling of alarm, which gradually lessened, and was soon exchanged for one of confidence and cordiality. Here our two surveying parties joined us, while the boats were again sent on

Slings and clubs of the Shook Arabs.

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Membidge (once Hierapolis).

in advance. We walked over the plain to the ruins of Membidge (once Hierapolis); there we found an extensive aqueduct, a temple believed to have been dedicated to Aterates, and other remains. We were accompanied by some Arabs, of whose friendly disposition we had an accidental proof by finding their arms (about thirty stand) in the tombs of the cemetery where they had deposited them before joining us.

Friendliness of the Arabs.

On our return to the steamer, we learnt that she had been visited during our absence by a good many Arabs, some of whom came off to her on inflated skins, while all evinced a friendly feeling towards us. They often caused us much amusement by their remarks. It was our invariable custom to lay-to on Sunday, and to allow some of the men to go on shore in the boat. When ready to return we heard their '*If you please* send the boat,' which was construed by the Arabs into '*Eblis*' (*Devil*), and they expressed their surprise to Rassam that all these Englishmen bore the name of *Eblis*—or *Satan*. Their attempts at pronouncing our English names were signal failures. Chesney was the only one they could manage. This they pronounced very well, but Cleaveland was *Clayown*; Charlewood, *Challoot*; Fitzjames, *Fissajimmis*; Escourt, *Scoot* (or smooth), &c.

Kalat-en-Nejm.

Next morning we received a favourable report from Lieutenant Cleaveland of the navigability of the river as far as Kalat-en-Nejm. Just as we were starting we perceived that the Arabs, who had shown symptoms of great alarm, were actually praying to be delivered from the terrible danger with which they believed themselves to be menaced. The first part of this day's descent was carried on with unusual care, the river

being wide and comparatively shallow, but it was easy work beyond this to Kalat-en-Nejm, the Castle of the Stars. The boats preceded us under Mr. Charlewood and Mr. Hector, who had come to us from his own vessel, the 'Tigris,' for orders. The Castle of the Stars occupies an important place in connexion with Arab astronomy, and with us it had the additional interest of being the spot where the tunnel was supposed to exist beneath the river. The castle itself is tolerably perfect, with the exception of a single breach made during its defence by the Arabs against the Turks. It occupies a commanding position, overhanging the water.

Tunnel under the Euphrates.

The passage beneath the river was naturally our leading object, and a descent of some 200 stone steps with inclined slopes at intervals, on the Arabian side, brought us into a spacious subterranean passage, which we followed, expecting to come out in Mesopotamia. Ere long, however, we found it blocked up with loose stones, which we proceeded to clear away, and succeeded in opening a practicable passage, which we followed until the dangerous state of the roof warned us to go no farther. Our expectation of crossing into Mesopotamia under the Euphrates was thus disappointed, nor were we able to ascertain whether the tunnel is continuous, from side to side. Arab tradition makes it pass the whole way under the river and come out at Serrēn Tower, nearly three miles from the left bank.

Serrēn Tower.

The surveying parties joined us at this place. Lieutenant Cleaveland returned with a description of the river as far as Kara Bambūge. On the left bank we discovered a raised causeway extending from the neighbouring hills to the river, where it terminates

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in solid masonry, with sloping buttresses down to the water, affording facilities for landing-places at different heights up the river. In these sloping walls are recesses, apparently in connexion with the landing-places, as if to afford storage for goods. We traced the paved Roman road for a short distance from this well-known zeugma (ford), and we found corresponding though less perfect remains on the Arabian side of this passage; the communication may have been carried on by a bridge,* or by means of boats only.

We had much friendly intercourse with the Arabs of the Aniza, as well as of other tribes at this place. They came off frequently and most gladly to visit us, paddling on their inflated skins to the steamer, which they began to regard as a friendly though most incomprehensible monster.

Descent resumed.

As soon as our astronomical observations at Kalat-en-Nejm were completed, we resumed the descent with the intention of reaching Kara Bambūge on the 30th. But when we were about six miles from our destination, a bank of pebbles, which had been completely hidden by the turbid waters of a violent flood when Lieutenant Cleaveland had passed down in his boat, suddenly interrupted our voyage, and not only caused serious delay, but gave rise to two or three stirring incidents connected with Arab life.

Not anticipating any lengthened delay, I walked on in advance of the steamer to examine the opening through the rocky banks of the river at Kara

* Captain Lynch found the abutments of this bridge, when passing at a later period up the river during the season of low water.

Bambūge. This pass is extremely striking; on the left bank huge masses of limestone rock rise perpendicularly to a great height above the river, which is here about 400 yards broad; whilst on the right bank equally grand and lofty chalk rocks are surmounted by the ruins of an extensive castle, which has been built in successive stages, from the water's edge to the summit of the rock, while the river below flows round the foundation of the castle, nearly at right angles to its previous course. CHAP. XIII. Pass of Kara Bambūge.

This passage was examined with much care with reference to our vessel, to which we then returned. In the meantime the state of the river had become more unfavourable to our progress. A rush of water had driven the steamer up the side of a bank of pebbles, which we saw must be moved somehow or other before she could be floated. All our energies were at once turned in this direction, and a large body of Arabs was employed to dig out our vessel. This operation, however, proved to be quite the labour of Sisyphus, for the current replaced the bank of pebbles almost as fast as it was removed. In this way, still hoping, and as constantly disappointed, things continued for some time, until our work was unexpectedly interrupted. Steamer gets aground.

Hassan Agha, sheikh of the Beni Saïd, had been invited to our steamer, and had received a fowling-piece in return for his kindness, shown previously to our surveying parties. He was sent back to his tribe in our boat, little expecting that this piece of attention would be attended by any unpleasant consequences. I was returning from taking some bearings with Lieu-

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tenant Murphy, when several shots near the landing-place caused us to hasten our steps with most uncomfortable forebodings, which were increased on our meeting Dr. Helfer, and hearing that our boat had been attacked and that Sheikh Hassan was killed. We hurried forward, our little band being joined by Mr. Hector, Corporal Greenhill, and three of our men; and found upwards of fifty Arabs preparing to attack the vessel, and at the same time almost cutting off our communication with her. Under these critical circumstances we took the bold course of advancing to clear a passage, which movement was seen on board, and a blank cartridge was at once fired from one of the steamer's 9-pounders, which ended the affair by causing the Arabs to scamper off.

An Arab blood-feud.

Mr. Fitzjames now joined us, and from him we received an explanation of the whole thing. Sheikh Hassan's tribe, the Beni Saïd, had a long-standing blood-feud with the Fahal Arabs, who, seeing their enemy landing from our boat, seized this opportunity of revenging themselves upon him. Hassan endeavoured to save his life by flying back to our protection, and as the boat shoved off, the undaunted Sheikh loaded his recently-acquired piece and returned the fire of his enemies. About twelve shots were fired at her before she could get out of reach, three of which struck her, though, as it proved, harmlessly, and the Sheikh escaped unhurt. If our blank cartridge had not produced a decided effect, our guns were provided with canister as a last resource; but having ascertained satisfactorily that no hostility was intended towards us, I accompanied Lieutenant Murphy on

Lt. Col. Estcourt, 45th Dr. Infantry, del.

Day & Haghe Lith.rs to the Queen

THE ARABS ATTACKING SHEÏKH HUSSEIN.

shore in the afternoon, while he continued his observations from the neighbouring high ground.

Difficulty in getting afloat.

Our undivided efforts were now given to the extrication of our steamer, which we saw could only be accomplished either by manual labour or by the flooding of the river. For the latter we should have had to wait; we consequently adopted the more laborious but immediate course. More than a hundred Arabs were employed in digging out the steamer, and, as soon as this was all but effected, we endeavoured to swing her round by means of pulleys and chain-cables. Many alternations of hope and anxiety attended our efforts during periods of storm, heavy rain, and fine weather, accompanied by rapid flooding of the river at one time, and by its formidably swollen waters at another, which at times floated the steamer, and swirled her round so rapidly and so violently as to break her chain-cable. This happened three times at least. On one of these occasions, which took place on April 2, the vessel, being at that moment afloat, was suddenly swirled round with such impetus that the cable was snapped in the middle, and in spite of all our exertions she was again forced up the side of the bank and almost out of the water. Fortunately a new hawser had lately come from the 'Columbine,' and we redoubled our exertions, that we might be in a position to make use of it. About a hundred Arabs were again employed, in addition to our own people, to remove the bank of pebbles, in which the recent flood had literally imbedded our steamer more firmly than before.

This state of things continued for a fortnight, when

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our happiness on finding that the increased depth of water had quietly floated us, was sadly damped by a very unexpected misfortune. Mr. Fitzjames had been paying us a visit as his raft passed downwards towards Kara Bambūge, a little short of which place she got upon the shoal, and he found her full of water, and all her provisions floating about. The river rose so much during the evening of the 17th as to sweep her off the shoal and enable him to bring her up under the chalk bank. His account of her ultimate fate shall be given in his own words :—

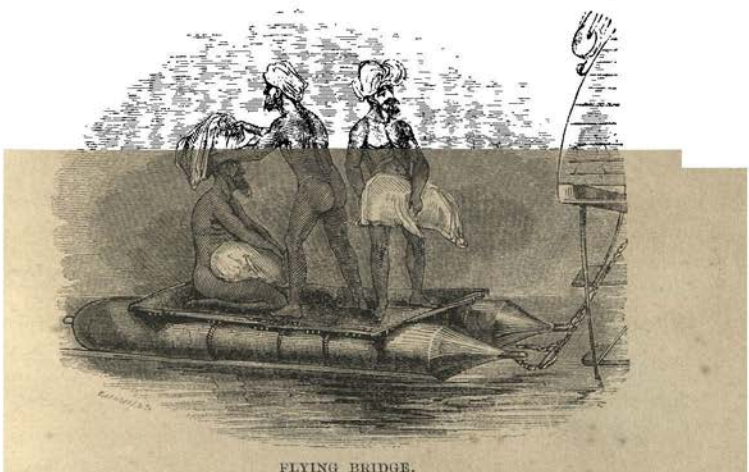
The raft submerged.

'The river here' (at Kara Bambūge) 'makes an abrupt turn to the right, the current setting along lofty chalk cliffs into a deep bay, terminating at a rocky point from which the current sets to the opposite shore at another rocky and perpendicular cliff. Here the river is about 400 yards broad, and the remains on each side seem to show that a bridge at one time stood here. At the first point all our efforts to get the flat-bottomed boat off being unavailing, we stood forward and endeavoured to place bags of cotton between her and the rocks, as she swept along them at the rate of seven knots. But with one crash, she sent her whole bow up, and down she went head-foremost in seven fathoms water, leaving barely time, by means of the cotton bags in the first instance, and eventually by the boats, to save ourselves. We saved, however, two casks of provisions, but my clothes were lost, and, what was still more serious, fifteen tons of coals for our voyage—the mooring-chains—also a number of rings, the jumpers, and some firearms also.'

Mr. Fitzjames landed about five miles lower down,

and walked up to join us with the unwelcome intelligence of the loss of the coal-raft, which was a serious one to the Expedition. We were just entering the passage where this accident had happened. The stream is somewhat rapid at this spot, where it is shut in between the fine white cliffs, already described, rising to the height of 150 feet on both sides; but its depth, and width of 400 yards, made it perfectly easy for a steamer, with the exception of one abrupt angle at the termination of the passage, where any failure of the

Bend at Kara Bambūge.



FLYING BRIDGE.

rudder might have caused this bend to be as fatal to us as it had been to the raft. We, however, were well prepared for the difficulty, and passed through it safely at half-speed, bringing up near the ruins of the castle of Kara Bambūge, where we were joined by the 'Tigris,' as well as the diving-bell and the pontoon-rafts. I arranged that these should remain here for the moment, in the hope of recovering some of the cargo of the wrecked raft, while we steamed the remaining nineteen

Joined by 'Tigris.'

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Steam to Beles.

miles to Beles on April 19. The 'Tigris,' with the flats and rafts, which we found very useful in supplying the wants of the steamers, and keeping up communication between them, shortly joined us at this place.

With the exception of the trying delay above Kara Bambūge, and the loss of our coals, everything had hitherto gone on well. Constant communication with Port William had been kept up by means of our horses, which from time to time brought us coals, provisions, spare cables, and even money, with perfect safety. Our friendly relations with the Arabs had been uninterrupted, save by the temporary misunderstanding about Sheikh Hassan; and Captain Estcourt's survey, and Lieutenant Murphy's astronomical points, had been carried thus far most satisfactorily. The ruined and interesting city of Beles became, as it were,

101 miles surveyed.

a fresh point of departure for us—101 miles had been carefully surveyed to this, the nearest point to Aleppo, the ancient port, in fact, of that city—and the place which, in our sanguine expectations of the speedy establishment of the Euphrates Line to India, we had already fixed upon as its modern emporium of commerce. It had been arranged, therefore, that the steamers should make some short stay at Beles, and that they should be met there by some of the principal merchants of Aleppo, who were anxious to give us this proof of their appreciation of the benefits they anticipated from our enterprise. Our vessels also required painting and some adjustment of their fitments, while we were also anxious to carry out some experimental trials of their speed and powers, for which this part of the river was very favourable.

Lieut. R. Cockburn, R.A. del. — G. Hanhart lith.

Day & Haghe Lith.rs to the Queen.

BALES.

A great change had taken place in Beles and its neighbourhood since it had been visited by our surveying parties a short time previous to our arrival. It was at that time quite deserted:—now we found more than a thousand tents of the redoubted Aniza tribe pitched in the centre of the rich pasture-lands by which it is surrounded, while another formidable tribe, the Beni Saïd, were encamped on the opposite side of the river. These circumstances did not cause us to make any change in our plans, and on April 20 we commenced clearing the vessels for painting. Thunderstorms and heavy rain prevented us from doing much before the 24th, when the proceedings of the Arabs attracted our anxious attention. Our confidence in them, which had hitherto been unshaken, was now somewhat staggered. Corporal Greenhill, of the Sappers, while employed in planting a station-flag in the vicinity, was suddenly seized by three mounted Arabs, who jumped from their horses, put their lances to his throat, and proceeded to cut off his brass coat-buttons, which they no doubt took for gold. Having obtained the coveted booty, they released the Corporal, and hastened away lest they should be seen from the steamer. Such conduct could not be left *unchecked*, and Captain Estcourt, Lieutenant Cleaveland, Mr. Fitzjames, and fourteen men moved up the adjoining ravine, where they encountered a strong party of the Aniza, apparently preparing to retreat, although this was evidently only a feint; for the Arabs, who were mounted on horses and dromedaries, endeavoured to intercept our party, and would probably have succeeded in doing so, had not Captain Estcourt at once

Camp of the Aniza.

Corporal Greenhill robbed.

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perceived their purpose, and with admirable presence of mind, made a rapid demonstration in light infantry order, which checked them, and gave his own party time to reach some ground, rather difficult of access, and within range of the steamer's guns and rockets. This affair, which had threatened to be serious, ended without anything more than an accident to Mr. Fitzjames, who, in his extreme zeal, broke his ankle in leaping from a height. The Aniza, however, kept us all on the alert; for as they chose to remain at a short distance from us, we were obliged to keep a party on the elevated ground close by to watch their movements.

Commanding ground at Beles.

The proximity of this commanding ground to the steamer caused some uneasiness among our men. As soon as I became aware of this feeling, I endeavoured to show them, practically, that the disadvantage caused by moderately elevated ground is not by any means so great as is generally imagined. I sent Sergeant-major Quin to such a position behind the crest of the hill as he would naturally have occupied, to enable him to fire down on our decks, when every one on board at once perceived that he could not effect this without exposing his head and shoulders quite as much as those of a man firing at him over our own bulwarks would have been, which fact may be exemplified by supposing a line to be drawn from the crest of the hill in question to the top of our bulwarks; or by a line from the cavalier of a fortress to the crest of a besieger's battery, which, although a good deal lower, is not subject to any prejudicial command. Nor was there, in reality, any serious disadvantage in this respect at Beles, since our steamers had ample means of repelling any attack

that could have been made; but our great object was to avert any threatened hostilities on the part of the Arabs, and to establish friendly relations, based, if possible, on a formal treaty of peace.

With this end in view we endeavoured at once to open amicable communications with them, proposing to follow these up by inviting the principal Sheikhs to visit us, and to take advantage of this intercourse to impress them by a display of our power. We opened negotiations through Mr. Rassam, who, finding the Arabs well-disposed, spent two or three days in their camp, accompanied by Mr. Elliot. His intimate knowledge of the Arab character gave him great advantages, and he stimulated their curiosity to see our wonderful steamships, feeling sure that their astonishment would effect all that we wished. On the 28th, Mr. Elliot (himself half an Arab) returned to us accompanied by three Aniza chiefs with eight attendants, who were at once accommodated with a tent which we had prepared for them on shore. We purposely postponed their visit to the vessels until the next day, in order to treat them, after dark, to a discharge of Congreve and Whale rockets along the surface of the river, which, owing to its width at this place, was particularly favourable to a grand display of the rushing power and increasing speed of these fiery missiles. This exhibition overcame our guests completely, and impressed them with a feeling of helpless inferiority. The rockets occupied them till supper-time, and on setting food before them, with spoons and forks, they said, 'God supplies us with fingers—why do you give us metal hands?'

Display of rockets.

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On the following morning their wonder and admiration were increased on their being shown every part of both vessels, and these feelings reached their climax, when returning on deck, after the bewildering sight of the engines, they were treated to some discharges of canister from the 9-pounders, as well as from some of our smaller brass guns, which produced such an effect on the surface of the noble river as would have been very striking even to those well acquainted with the effects of artillery, while to the Arabs it suggested the utter impossibility of any attempt to resist such tremendous power. The result of this exhibition was all that we could have wished. The Aniza chiefs themselves proposed to render our present good understanding permanent by means of a treaty, and consented to go into the necessary details forthwith. A formal meeting for this purpose therefore took place between us in the evening, and a treaty of amity and permanent peace between the government of King William IV. and the important Arab tribe of the Aniza was discussed and finally agreed upon, its basis being the establishment and maintenance of commercial facilities on friendly terms.*

Treaty with the Aniza.

Their chief (Jedaan) was much pleased, and repeated to me constantly, 'We are friends to the English; I have made you my father, you must take care of me.' The favourable disposition of our guests towards us induced us to go a step further, and to press them to give up their long-cherished hostility towards the Shamar, an almost equally powerful Arab tribe. At

* This document, no doubt, still exists in the archives of the Foreign Office.

first there did not seem to be the smallest prospect of success, for my well-meant efforts were met by the Aniza Sheikh with the curt and apparently conclusive reply, 'That they were born to be enemies, and must continue to be so.' A long discussion followed, with very little effect, until I remembered the existence of a passage in the Koran inculcating peace and goodwill, which Rassam was able to repeat to them in pure Arabic—which carried our point, and peace was agreed upon by the Aniza and Shamar tribes, and cemented by a marriage, for which I at once provided a limited dotation on the part of the British Government. We thought it better to let the Aniza chiefs depart without presents, which, under existing circumstances, might have lessened the high position which we had so carefully maintained.

Peace between the Aniza and Shamar.

Our friendly relations with the Arabs thus happily restored, our ordinary operations were resumed, with renewed confidence and satisfaction, on May 2. We lightened the 'Tigris' in order to make trial of her speed and power, which were both satisfactory, although in neither case was she equal to her consort the 'Euphrates,' which stemmed the current in the most satisfactory manner on the following day. During our stay at Beles we had had the pleasure of a visit from Lieutenants Crawford and Henderson, of the Royal Artillery,* from Aleppo. They now left us, taking with them two of our engineers, Hurst and Clegg, and the carpenters, Jackson and Watt, who had all rendered such important services that their departure was felt to be a most serious loss: but their time had expired,

* Each has now the rank of Major-General.

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as had also that of a very valued visitor, Mr. William Estcourt, who had joined the expedition at Bir, and remained with his brother, sharing in his and our occupations up to the time of our halt at Beles. He too now left us, carrying with him the sincerest good wishes of our whole party.

'Tigris' descends to Ja'ber Castle.

Everything was now ready for the prosecution of our descent, and the 'Tigris' steamed down the river (on May 4) to Ja'ber Castle, the 'Euphrates' *preparing* to follow, on the arrival of a supply of provisions from Aleppo, on the 6th. Passing the minareh, and the three remaining towers of the ancient castle of Beles,* she followed the tortuous course of the river, between low banks clothed with tamarisk and forest trees, inhabited, at this season of the year, by thousands of Arabs. We brought up close to the Tigris, a little way below Ja'ber. A drawing by Major Estcourt gives a most faithful representation of the so-called Giant's Castle, and its lofty minareh, with Tell Marabbou (the Saint's Hill) in the background. Tradition, as given to us by the neighbouring tribe the Weldah, ascribes these works to Alexander the Great, who crossed the Euphrates at the adjacent passage at Thapsacus. But another account states that the castle was constructed by an Eastern conqueror named Ja'ber, to support his invasion of Egypt. Its position would no doubt have given it great importance in early, and even in later times, when it, as well as many other strongholds, was besieged and eventually taken by Nur-ed-din. Up to the time of Benjamin of Tudela† it was a very im-

* Plate L. p. 213, vol. ii., 'Expedition to Euphrates and Tigris.'

† Sela Midbarah, vol. i. p. 89 of 'Benjamin of Tudela,' by Asher.

Lieut.t R. Cockburn, R.A. del.t

Fairland litho.

KAL'AT JA'FER.

Lieut. Pitt James R.N. del.

Day & Haghe Lith.rs to the Queen.

THE STEAMERS PASSING THAPSACUS.

portant place. It reminded us strongly of the citadel of Aleppo, although it is something loftier, and rather more extensive. CHAP. XIII.

Two hours' steaming, between banks richly wooded with tamarisk, allspice, and jasmine, brought us to El-Edhēn, near which place the stream is separated by some islands into three branches, one of which was followed by the 'Tigris,' while the 'Euphrates' took a different course, under the impression that we should find it a more favourable one for her; but she ran aground, and we had to recall the 'Tigris' to give us assistance—and thus both vessels were delayed, just as we were approaching some places of deep interest. We had to empty the boilers to lighten the vessel, and thus got her afloat again the next morning, when all hands were occupied cutting wood for the subsequent part of our voyage.

Ruined city of Racca.

We resumed the descent on the 9th, keeping one of the boats ahead, to facilitate our examination of the river, and give notice of any obstruction. In this way we carefully examined the banks on either side of the memorable passage of Thapsacus (now Hamman), and also the extensive ruins of ancient Susa, and other sites of interest which we visited during our thirteen miles' steaming to Racca, where we brought up, notwithstanding its low and swampy situation, which on the score of health was very undesirable. It is, however, a place of some celebrity in Moslem history, although our researches next morning were scarcely repaid by the discovery of a spacious cistern, the remains of a mosque, the ruins of Haroun-el-Raschid's palace, and the extensive walls which once surrounded this city of

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the Khaliph El-Mansour, whose name has been deservedly handed down to us in connection with astronomical observations, and with his promotion of the science of astronomy itself by the measurement of a grand base-line on the plain near this city.

Arrival at Amram.

The astronomical position of Racca having been fixed by Lieutenant Murphy, we steamed eleven miles farther down the river to Amram, which is situated on its left bank, about halfway through the forest of the same name. On the right bank is an elevated plain bounded by a range of chalk hills. Here we again met some of the friendly Weldah Arabs, but, to our surprise, they scampered away from their tents in the wildest manner, owing, as we soon learnt, to an alarm caused by the Effadees, who had crossed the river on skins to seize their bullocks, as they thought, at our instigation.

An assurance of friendship was quickly given by Rassam, 'on his head and beard,' which solemn invocation induced them to return; and we followed it up by offering them bread in token of friendship, in which spirit they received it, and ate it with evident relish and confidence. Rather more than a hundred of this tribe were present on this occasion, and these, having secured the alliance of the powerful strangers, uttered shouts of defiance against the Effadees, who were looking on from the opposite bank of the river.

Barter with the Arabs.

We thought this a favourable opportunity for producing some of the goods, which we had brought out for the purpose of opening a trade by barter, but our negotiations were interrupted by the ludicrous circumstance of one of our guns being accidentally turned towards the Arabs. The moment they perceived this,

all bartering was at an end, and in less than five minutes all had fled. The Sheikh afterwards returned alone to ask why we desired to hurt them, since they were quite ready to be submissive, and to give us wood or anything else they possessed; and thus a good understanding was re-established, and barter at once resumed with the greatest avidity by the Weldahs, and their example would have been eagerly followed by their enemies the Effadees, had it been practicable.

Wood-cutting on shore.

The facilities for laying in a store of wood induced us to remain another day at Amram, and to send parties on shore to cut it; and our men, while so employed, found themselves, although close to the vessels, in a singularly isolated position; for so dense and tangled was the undergrowth of the forest that, although guided by the sounds of numerous hatchets and billhooks, some of the party were almost unable to find their way from one steamer to the other—a distance scarcely over a hundred yards.

Whilst all hands were busy cutting and stowing away on board as much wood as possible, Mr. Ainsworth and I made a walking excursion to some ruins in the neighbourhood. We had not proceeded far before eight Arabs, each armed with a long gun in addition to their spears, favoured us with their company. Thinking this suspicious, we took the precaution of separating from each other—Ainsworth, with his usual coolness, keeping at such a distance as would enable us to give each other mutual support. Moving on thus cautiously, I suddenly saw an unexpected enemy close to us—a cobra-capella just rising on his tail, and ready to dart his fangs into my companion, in

Threatened attack.

A cobra-capella.

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which no doubt he must have succeeded, had not one of the Arabs, with admirable dexterity, struck the point of his spear through the creature's head. This feat effected a double purpose. It freed us from the cobra,* and led to a friendly understanding with the Arab, who, pleased with himself, was ready to meet our advances; and, mutual confidence being thus established, we went on to their tents, which were in the neighbourhood.

On recrossing the river to our steamer, we heard that the day's work had been most satisfactory, and the descent was therefore resumed next day, the flat-boats preceding the two steamers as usual—'Tigris' leading the way. The river was deep and favourable to us, its width varying from 250 to 300 yards. On the right bank we had a continuation of the elevated plain already mentioned, terminating in a range of hills, whilst on the left was the luxuriant forest, tenanted by innumerable nightingales.

The steamers descend through the forest.

After steaming about 45 miles, we stopped under the left bank, where we met the large tribe of Affadell Arabs, fully 2,000 strong, who crowded the river's banks at first, but retired as we came near. On receiving from us reiterated assurances of friendship, they took courage and returned, and came quite close to the vessels. They were all armed with very short muskets and spears, and had also short swords: they made an urgent but of course ineffectual appeal to us, for assistance against their enemies on the opposite side of the river. Having obtained another good supply of wood, we steamed rapidly towards what

The Affadell Arabs.

* The skin of this reptile may be seen in the Zoological Society's collection.

would have appeared to be a mountain barrier, if it had not been evident that the boats had found a passage through it, which we followed, our wonder increasing as we advanced. It seemed as if we had entered one of Nature's grandest works. On each side of the river, perpendicular cliffs rise to a height varying from 300 to 500 feet; the Euphrates has here, for the third time * during its course from Bir to the ocean, found its way through a mountain barrier, and had brought us to the so-called 'beetle-browed' precipice of Balbi.†

Our descent was continued from hence, with little variation in the scenery, for about five miles, when we brought up at the remains of Halebi, and opposite to those of Zelebi. The latter were once the summer residence of Zenobia; and the ruins present the form of an acute triangle, having its base resting on the river, whilst its sides climb the acclivity of a conical hill, and terminate at its summit in a small acropolis. It was defended by walls flanked by strong towers, which, as well as the public and private buildings, were all constructed of fine gypsum (which abounds along the Euphrates), and are as sharp and fresh as if they had been recently built.‡

Halebi and Zelebi.

While we were examining these most interesting ruins, a *sye* (messenger) brought from Aleppo the Government despatches of April 1. Our previous

* The other two instances are at the Whirlpool of Gourlou (p. 227), and at Kara Bambûge (p. 235).

† Voyage of Gasparo Balbi.

‡ A fuller description of the ruins of the city of Zenobia, including its extensive necropolis, temple, and palace, will be found in the 'Expedition to the Euphrates and Tigris' (vol. ii. pp. 417, 418).

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letters had all been encouraging. But I now learnt, from Sir John Hobhouse, that, owing to the heavy expenditure, it was decided to break up the Expedition on July 31. We were totally unprepared for such intelligence—for such a blow, in fact; but feeling that it would be useless, and very discouraging, at a moment when all was prospering, to promulgate this unlooked-for decision of the Home Government, I thought it best to keep it to myself, and to continue the service with, if possible, such increased exertions, as might, by their success, secure not only the support of the country, but the approbation of His Majesty's Government also. I made these expectations known to the President of the Board of Control, and then hastened our departure as much as possible.

Lt Col Estcourt, of 3rd L.I. del. G. Hawkins, Junr. lith.

Day & Haghe, Lithrs to the Queen

CHAPTER XIV.

DESCENT CONTINUED FROM ZELEBI TO IS-GERIA—LOSS OF THE 'TIGRIS' STEAMER—PROSECUTION OF THE DESCENT.

LOOKING back upon the mountain barrier through which we had been safely guided by our careful helmsman and skilful officers after leaving Zelebi, it seemed as impassable, and as completely closed, as it had appeared to us when approaching it from the western side. The range of hills which is thus pierced by the river, comes from the heart of Arabia; and having nearly touched Palmyra, it runs in the direction of Zelebi, and extends again beyond the Euphrates almost the whole way across Mesopotamia. Leaving this singular passage behind us, $4\frac{1}{2}$ hours' steaming brought us within sight of Deir. The river in this part of its course is wide and deep, but very winding.

Arrive at Deir.

Deir, although consisting chiefly of mud-built dwellings, is a very pretty little place, and contains about a thousand of these houses, which are all square and flat-roofed, and placed on a conical hill rising from the right bank of the Euphrates, from which it is insulated by a canal cut from one part of the river to another along the south side of the town. We were afraid that this canal would not afford sufficient depth of water for our larger steamer; the 'Tigris' therefore preceded us to ascertain this fact, but finding that all was

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right, the 'Euphrates' followed her to the town of Deir, where a salute was fired, and the ensigns of Turkey and Great Britain displayed. We found Deir admirably suited for a permanent station, and made arrangements at once, therefore, for the establishment of depôts of coal, timber, charcoal, and stores at this place. I also despatched a messenger from hence with a map of the river as far as Deir, for the satisfaction of the President of the Board of Control, and then resumed the descent on May 18.

River Khábúr or Araxes.

We steamed, under the most favourable circumstances, to the mouth of the Khábúr, which, as the Araxes of Xenophon, possessed especial interest for us. In the angle formed by the junction of the Khábúr and Euphrates, and near the right bank of the former river, we traced the ruins known among the Arabs as Abū-Serai, once Kerkisyah, and the supposed Carchemish of Scripture.* On the opposite bank are the remains of Calneh,† probably the Calanne of Nimrūd; and between these two sites are the ruined abutments of the bridge by which the army of Trajan, in all probability, crossed the river when on its march to Lower Mesopotamia. We ascended the Khábúr, in the smaller steamer, as far as was practicable, but found the water fail much sooner than was at all to have been expected, taking into account the length of the river's course from the vicinity of Nisibin. Much disappointed, we had to return, putting about somewhere near the spot where Xenophon must have crossed in his downward march. We anchored alongside our consort late in the evening, and pursued our course next morning as far

* Isaiah, x. 9. † Genesis, x. 10.

as the town of Ma'den, where our steamers again displayed the British and Turkish ensigns, to the great delight of the inhabitants.

Our short halt at this place was full of interest to us. A walk of five miles towards the south brought us to the extensive castle of Rahabah, the Rehoboth of the Ammonites.* It stands on the crest of an isolated hill, and its remains are remarkably fine and massive. Returning to our steamer we resumed the descent, the river carrying, as it had done lately, a mass of water, by a winding course as far as Salahyah, where, in addition to remains of ancient walls, there is a fine gateway, and an extensive castle. Here we purchased, as rapidly as possible, a supply of wood, and hurried off, intending to bring up for the night at Anna, little anticipating the fatal results of our speed and activity.

Rahabah once Rehoboth.

The weather had been very fine and promising during the forenoon, but a change took place soon after we left Salahyah, and the atmosphere became thick and gloomy—but not more so than had been the case occasionally of late, especially on the preceding evening—and we proceeded on our voyage without the slightest uneasiness being felt by any of our party. At 1.35 P.M. on May 21, both steamers left the bank with the full expectation of reaching Anna that afternoon; but only twenty minutes later, just as we were rounding the bold chalk cliffs on which stand the prominent ruins of Corsote, an ominous change took place in the weather. Clouds, much more threatening than any we had yet seen, appeared and spread rapidly,

Commencement of storm.

* Genesis, xxxvi. 37, 'Saul of Rehoboth.'

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accompanied, as Mr. Ainsworth remarked, by a portentous fall of the barometer. Still we did not feel any particular alarm, believing that the storm would pass by, as it had done of late on previous occasions. But we soon found that this was not to be the case now.

In the course of a few minutes, dense masses of black clouds, streaked with orange, red, and yellow, appeared coming up from the WSW., and approaching us with fearful velocity. To secure the steamers against what promised to be an ordinary strong gale, immediately occupied all our attention, at the very moment that we were arriving at the rocky passage of Is-Geria. Indeed, we were already so close to it that there was not sufficient space to round to and bring up; consequently, it became most prudent to steam onwards, the result of which I now give in the words of Mr. Fitzjames:—

Arrival at Is-Geria.

Mr. Fitzjames's account of the hurricane.

'A squall was observed on the right hand, which it was thought would not reach us; but just as we were going through the rocky passage of Is-Geria (which, however, we did not see, as there were three feet of water over the rocks), the squall was observed coming in our direction from the WSW. with great rapidity, and looking like a large cloud of black mud. As soon as the rocks were passed, the "Tigris" made signal to pick up our berth, and she rounded by us to the left bank. As our broadside came to the stream, we were taken with the violence of the hurricane, which made us heel considerably; but being too near the "Tigris," it became necessary to back our paddles, to avoid a fatal collision. It was blowing tremendously, and the air so thick with sand that we could scarcely see. On our bow touching the bank, Charlewood and a number of

the crew jumped on shore, and by the greatest exertions got an anchor out, which, with the full power of steam, held her till two chain-cables were got out, and secured by means of jumpers driven into the ground; but with all this she dragged, and would have gone down at her anchor had the storm continued—for the waves were then four feet above the bank of the river. When at its height, we saw the poor "Tigris" fall off from the shore, and drift past us at a fearful rate, broadside to the wind, and heeling over considerably. She soon disappeared in the cloud of sand, but on looking astern, soon after, I saw her in a sinking state, with her bow already under water—in fact going down, and it is believed that, on reaching the bottom, she turned keel upwards.'

Mr. Charlewood's account of the hurricane.

Such is the account written, on the instant, by the lamented Fitzjames. The following is that given also at the time by Mr. Charlewood, who says: 'At two P.M., the men having dined, all was ready for proceeding down the river, and little did we imagine, when shoving off from the bank, how few of our party would ever tread the ground again. Having steamed downward for about a quarter of an hour, the clouds towards the SW. began to assume an alarming appearance. The wind, which was before from the SE., gradually fell to a light breeze. These ominous symptoms caused us to furl the awnings and put things in order, and the "Tigris" appeared to be doing the same. The clouds by this time were quite terrific. Below the darkest of them, there was a large collection of matter, of a dark crimson colour, which was rolling towards us at an awful rate; and at the

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moment we were looking most anxiously for a signal from the "Tigris" to secure to the bank. But we were then passing through the first belt or mass of rocks at Is-Geria laid down in the Colonel's chart, and she was therefore obliged to postpone the signal—a fatal delay! But the instant the rocks were passed, the signal was made, and we rounded to, to endeavour to bring the vessel's bow up the stream, and the "Tigris," then a little ahead of us, did the same. But, at this very moment, a tremendous gust of wind came on us, and nearly laid us on our broadside, at the same time hurling both against the bank with an awful crash. The water forced the windows open forward, and would have speedily swamped the vessel, if the carpenters had not rushed below to close the openings. Only one resource now remained—namely, that of securing the vessel, for if she sheered off, all would be lost. For, day being turned into night by clouds of sand, the hurricane, which was carrying the latter, would blow the vessel so far over that she must fill through the windows. But the necessary exertions were forthcoming at this trying moment. With some difficulty a part of the men got ashore, and having succeeded in placing three anchors in the ground, with the chain-cables secured by means of jumpers driven into the earth, and the engines working at full speed, the "Euphrates" was saved by these means, notwithstanding the raging storm. But it is believed by all the survivors, that she must have experienced the fate of her consort, if the height of the raging storm had continued a quarter of an hour longer.'

To revert to what occurred on board the 'Tigris,'

PLAN

of the Position of the

TIGRIS AND EUPHRATES

Steam Vessels

on the 21st of May 1836.

and the loss of the former Vessel

References

A. *The Tigris previous to the Hurricane (blowing from W.b.N.)*

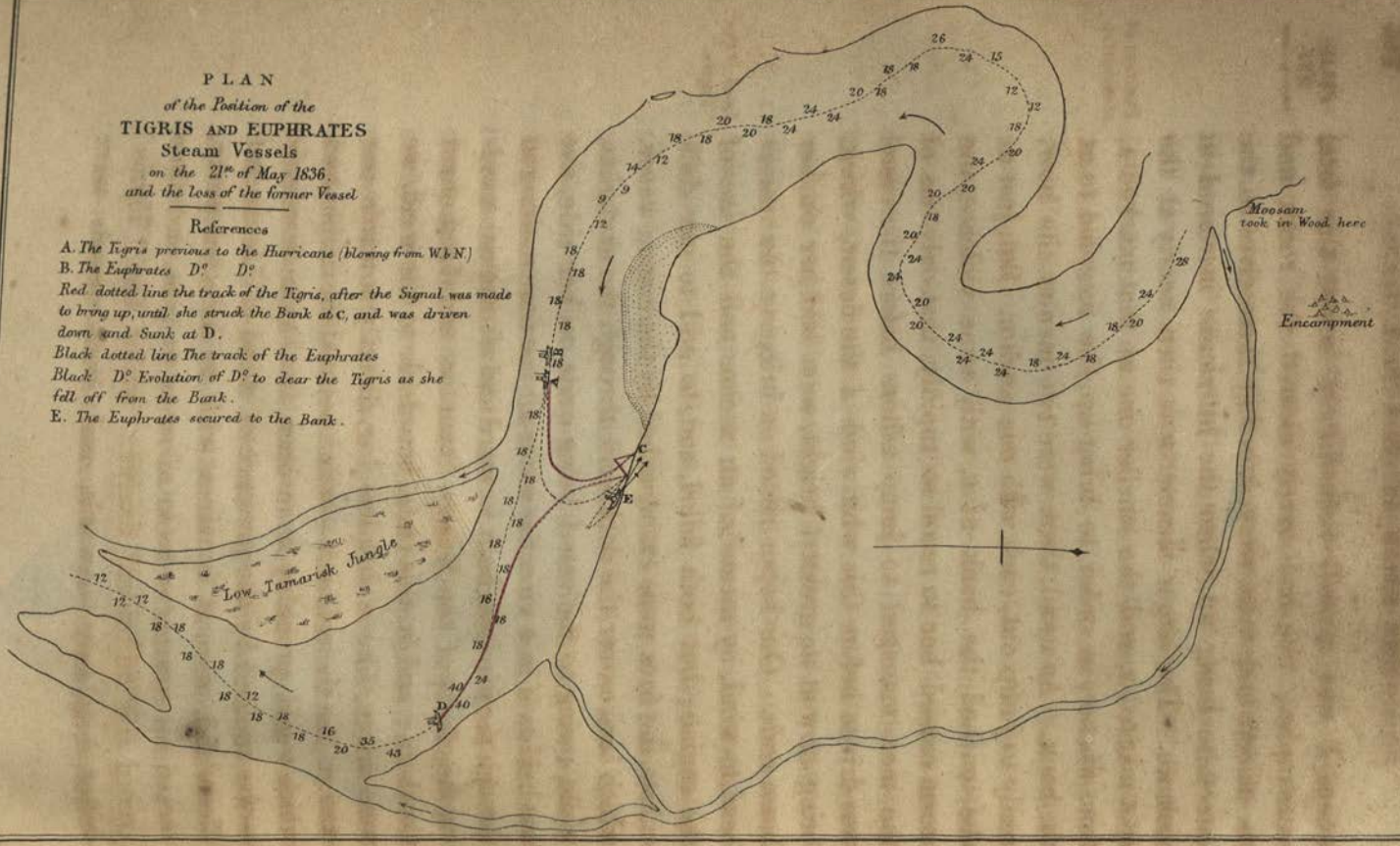
B. *The Euphrates D° D°*

Red dotted line the track of the Tigris, after the Signal was made to bring up, until she struck the Bank at C, *and was driven down and Sunk at* D.

Black dotted line The track of the Euphrates

Black D° Evolution of D° to clear the Tigris as she fell off from the Bank.

E. *The Euphrates secured to the Bank.*



London Longman & C°

where I was myself, immediately before this fatal catastrophe. She had barely cleared the rocks, and the officers and men were exerting themselves to the utmost to bring up, when the hurricane increased in violence. The larger steamer was then nearly at the spot marked B, and the smaller one at that marked A, from whence, in order to bring up, she rounded to at the bank. As usual, there were two men at the bow, ready to jump out, each with one anchor. But, just as she touched the bank at C, with some violence, the storm caused her to recoil so rapidly, that only one of the men managed to jump ashore before the vessel was driven before this whirlwind of the desert, which, being now at its greatest height, soon laid her on her beam-ends. Our hopes rested on bringing the vessel's head to wind, by means of an anchor and the use of the engine; but both failed, and, to add to our difficulties, the fires were extinguished by the raging waves, which broke over the deck, and through the skylights, while, owing to the vessel being quite on her side, she was held as if in a vice, the water all the time rushing in through the windows both forward and aft, notwithstanding the efforts of the Messrs. Staunton and Lieutenant Cockburn; and in this state, broadside to the wind, we were driven, like a helpless log, directly towards our consort. But the collision—which seemed inevitable, and which would probably have been fatal to both vessels—was avoided by the presence of mind of Lieutenant Cleaveland, who, at imminent risk to his own party, backed his steamer so as to allow us to pass, and thus averted this additional danger; whilst the 'Tigris' drifted helplessly onwards, and both vessels were

Position of steamers.

Loss of the 'Tigris.'

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instantly lost to each other in the more than Egyptian darkness of this calamitous day.

The 'Tigris's' brief career being now almost at an end, Lieutenant Lynch reported her to be sinking, and the word was given for all to endeavour to save themselves; when, at that critical moment, a gleam of light showed us the bank at a little distance, and the hope of reaching it caused the order to be given to 'stand fast.' It was but for an instant: in a few seconds all was total darkness again, and in less than another minute the 'Tigris' was going to the bottom, with every individual at his post. The deck was already quite under water, when again a momentary gleam of light once more showed us the bank of the river not far off; and in my own case it is gratefully remembered that this enabled me to take the right direction, notwithstanding the darkness, which had returned instantly. What I recollect about this eventful moment is, that in diving out of the vessel my back was caught by the ridge-rope of the deck-awning, so that we must already have been seven or eight feet below the surface; and whilst endeavouring to get clear, I felt some one at my back, but we were immediately parted by the violence of the waves.* Continuing what was actually diving more than swimming, my feet touched the ground in a cornfield. Up to this moment I had been in total darkness, but at this instant, turning my eyes towards the river, I had the last glimpse of the 'Tigris' keel upwards.† In addition to Mr. Thomson and myself,

'Tigris' goes to the bottom.

* As well as we could make out, this was Mr. Thomson.

† As the Tigris went down in her natural position, and was afterwards found with her keel uppermost, it is supposed that on touching the

the two Stauntons, and Messrs. Lynch and Eden (both greatly exhausted), were saved, besides nine of the men, viz. :—William Benson and E. Laurie, seamen; Corporal Fisher, of the Royal Artillery; Vincenzo and Giacomo, Maltese cooks; and four natives.

Names of survivors.

We had scarcely time to become conscious of our safety, when darkness vanished, and the waves, which had carried us some feet above the river's bank, and landed us in a cornfield, had ceased to exist. All became calm and clear as before, and barely 25 minutes had seen the beginning, progress, and termination of this fearful hurricane. This whirlwind of the desert had swept across the river *only*, extending but very little above and below the spot where the steamers were—which singular fact we soon ascertained from Mr. Hector, who was with the surveying-boats about ten miles below the scene of the disaster, and who experienced nothing more than a moderate gale.

Short duration of hurricane.

Its limited extent.

With our assistance, Lieutenants Lynch and Eden, although most painfully exhausted, managed to crawl on; and we had gone but a little way along the river's bank, in search of the other vessel and her crew, with feelings more excited between hope and fear than can be described, when, to our inexpressible relief, we saw Messrs. Charlewood and Ainsworth approaching us, with some of their men. This at once told us that *all* was not lost, and we soon had the delight of learning that the 'Euphrates' had outlived the tempest. With

The 'Euphrates' safe.

bottom first with her bow on going down, she was whirled round by the force of the current, and settled down bottom upwards, as she was found; and I must have seen her at this very moment, and before the waves hid her from our sight.

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truly grateful feelings, yet feeble in proportion to the mercies we had experienced, we now met those friends, whose joy and thankfulness almost equalled our own. Very brief, however, were our greetings, for there was work—and most pressing work—to be done; and those we had just met hastened on, in the hope of rescuing some of our missing companions.

We were barely able to reach the 'Euphrates,' where everything on board showed how nearly she also had been lost, and feeling at the moment quite sanguine as to the safety of those who had been on board the 'Tigris,' I met Madame Helfer with quite a joyous feeling, and even repeating the distich, 'Si vous voulez danser, je vous prie de le faire commencer'—thus conveying to her the erroneous impression, which was my own also at the moment, that all were safe; nor was this expectation unreasonable, since, with the exception of Lieutenant Cockburn, all were good swimmers, and unlikely to have failed in reaching the bank. But when the next morning brought no tidings of our missing friends, we became deeply anxious: Arabs were despatched to make enquiries everywhere, and our men and boats were employed in searching the islands, and examining the banks on both sides of the river, while Mr. Hector made particular enquiries at and near El-Kaim. But two days passed, and still there was no intelligence, and our hopes were now reduced to the possibility of finding one or two of our companions in some of the Arab tents.

No survivors found.

During this period of anxious search and enquiry, the weather was marked by repeated storms of thunder and lightning, and on May 24 we had a shower of

hailstones, some of which measured 1½ inch in diameter, and weighed 120 grains each. On the 25th, the bodies of Mr. Sader and of the sapper Macdonald were recovered, and were buried by their commander, near Erzi, on the evening of the same day.

Two bodies found.

All hope of finding any survivors being by this time nearly given up, it became my duty to think of the future; and I at once assembled a board of officers, consisting of Lieutenant Cleaveland as President, and Messrs. Charlewood and Fitzjames as members, who were instructed to go into all the circumstances attending our late disaster. After a most painstaking examination for five hours, and after going carefully into all the evidence that could be obtained, it was decided that every possible effort to save the 'Tigris' had been made, and that the conduct of all on board had been most praiseworthy.*

Board of enquiry.

Having thus done justice to the past, and to those who were no more, the best course to be followed, under our present altered circumstances, became the all-absorbing consideration. We were already far advanced on our mission, being, in fact, midway between the Mediterranean and the Indian Ocean, with the choice before us of either endeavouring to reach the latter, or of retracing our steps to the former. Had this question stood alone, the decision would have been easy and simple; but it was far otherwise, and many considerations of a complicated nature had to be taken into account. One of our steamers, all our money, and a large portion of our party, had been lost; and it remained to be seen whether the moral

Our position.

* On account of want of space, these proceedings are not given here.

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courage of the survivors would be too much shaken to permit them to prosecute the enterprise with the requisite zeal, especially when they should be made acquainted with the instructions from home to terminate our labours at once, which instructions had (as I have already stated) been hitherto kept in abeyance by me. I now felt that this was the moment to make them known.

Continuation of the enterprise decided on.

I think that it will readily be admitted that, taking into consideration our isolated position in the heart of Turkish Arabia, the task of carrying on the enterprise was one fraught with much anxiety and responsibility. Great as these were, however, and heavily as they weighed upon me, the conviction that I was fulfilling an imperative duty to our country exceeded them all; and my determination to proceed, if possible, was immeasurably strengthened by the way in which the disheartening intelligence I had to communicate was received. One and all, officers and men, at once expressed themselves not only ready, but anxious to second me in every way, and volunteered to forego their Expedition pay, in order to lessen our expenses as much as possible. So supported, by such a set of men, I no longer hesitated what course to pursue. The prosecution of the enterprise was decided on.

'Tigris' crew sent home.

Before, however, resuming the survey, it became necessary to decide on the painful but unavoidable step of sending home the survivors of the unfortunate 'Tigris.' Motives of economy—considering the views of the Government—rendered this necessary. It was accordingly settled that this decision should be carried out on reaching Anna, and we then prepared to

resume the descent, pending the arrival of funds from Bagdad. We collected some of the arm-chests and other things which had been washed ashore from the 'Tigris,' and up to the last moment of our stay in this part of the river, our exertions were unremitting to obtain traces of the lost ones, and to find our poor little vessel. This spot, so fatal to us, had been so in a far greater degree to the Emperor Julian, whose fleet and part of his army were, according to Gibbon, lost at this point of his descent towards Mesopotamia.*

Loss of the Emperor Julian's fleet.

Our efforts to find the 'Tigris' were quite ineffectual, and we quitted Is-Geria on May 25, and steamed past El-Kaim under circumstances as favourable as possible, after so great a calamity. In the afternoon we approached Rava, where my faithful pilot during my solitary raft-expedition (Getgood) came on board. This was to me a great and very unexpected pleasure, since his death had been reported; whereas we found him ready to renew his former services, and to help us in navigating with a steamer those waters which he had so zealously assisted me in surveying. We gladly received him on board, and under his guidance passed safely through the partially-broken waters which then concealed the Rocks of Karablah; then skirting the town of Rava, our steamer was brought up at the outskirts of the long town of Anna.

Getgood comes on board.

We expected that this place would eventually become a permanent station, and we gladly availed ourselves of our temporary halt to celebrate our gracious

Short stay at Anna.

* According to Ammianus Marcellinus (lib. xxiv. cap. 1), 1,000 vessels were lost on that occasion. These hurricanes are, however, extremely rare on the Euphrates.

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Sovereign's birthday, by firing a royal salute on the morning of the 26th, and treating the Arabs to a display of rockets after dark. Here we also made all such arrangements for continuing the survey as were practicable until funds should be sent us from Bagdad; and from this point the survivors of the 'Tigris' departed for England, bearing with them a despatch to the Government, giving an account of what had occurred, which afterwards appeared in the 'London Gazette.' Under the impression that this despatch, and what followed upon it, will not be devoid of interest to the public, even after this lapse of time, I venture to insert them here:—

Despatch sent home.

Letter from Colonel Chesney to Sir John Hobhouse.

'"Euphrates" Steamer, Anna, May 28, 1836.

Colonel Chesney to Sir J. Hobhouse.

'SIR,—It is with feelings of the deepest regret that I do myself the honour of informing you that the "Tigris" steamer was totally lost* during a hurricane of indescribable violence, which, after the short struggle of about eight minutes, sent a fine vessel to the bottom in five fathoms† water, and deprived His Majesty of fifteen valuable men, with five natives in addition.‡

'My reports up to the 17th instant at Deir will have informed you that all was going on as successfully as the most sanguine could possibly desire: we found the Arabs well-disposed, and quite ready to form depôts

* It appears, by letters subsequently received from Colonel Chesney, and more recently from Lieutenant Lynch, that there is a prospect of the property of the 'Tigris' steamer being eventually recovered.—India Board, February 1838.

† The last depth sounded: we since found three-and-a-half fathoms on one side the spot, and five fathoms on the other side.

‡ List of the officers and men who perished, p. 270.

Colonel Chesney to Sir J. Hobhouse.

for us of wood, charcoal, bitumen, and lignite-coal—all met with in abundance, and tried with complete success.

'In addition to these marked advantages, the survey has been carried 509 miles down "the great river," which seemed in all respects favourable; in short, all was continued prosperity up to the afternoon of the 21st instant, when it pleased God to send the calamitous event, of which it is my duty to give a feeble sketch.

'A little after 1 P.M. on that melancholy day, the flat-boats being a little ahead, and the "Tigris" heading the "Euphrates," a storm appeared, bringing with it, high up in the air, clouds of sand from the west-south-west quarter. At this moment we were passing over the rocks of Is-Geria (deeply covered), and immediately after we made the signal for the "Euphrates" to choose a berth and make fast—which was done more as a matter of precaution, on account of the difficulty of seeing our way through the sand, than from apprehension that the squall would be so terrific.

'The "Tigris" was immediately directed towards the bank, against which she struck without injury, but with so much violence as to recoil about eight yards, leaving two men on the bank who had jumped out to make fast: the wind then suddenly veered round, drove her bow off, and thus rendered it quite impossible to secure the vessel to the bank, along which she was blown rapidly by the heavy gusts—her head falling off into the stream as she passed close by the "Euphrates," which vessel had been backed opportunely to avoid the collision. The engines were working at

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Colonel Chesney to Sir J. Hobhouse.

full power, and every endeavour made to turn the vessel's bow to the bank; one anchor was let go, but the heel of the vessel made it impossible to get the other one out. She was then nearly broadside to the wind, with the engines almost powerless, and the waves, rising to the height of four or five feet, forcing their way in at the windows.

'Lieutenant Cockburn, the Messrs. Staunton, and some of the men, made ineffectual attempts to keep out the water, for the fate of the vessel was already decided; and the forepart of the deck being under water, Lieutenant Lynch came to report that the "Tigris" was sinking, and the word was immediately passed for all to save themselves. At this very instant, a momentary gleam of light faintly showed the bank at the apparent distance of eight or ten yards; and as there seemed every probability that the stern would touch it before she went down, Lieutenant Lynch encouraged the people to remain steady until they reached the land.

'All were on deck at this critical moment; some were clinging to the ropes of the awning, the paddle-boxes, and funnel, but the majority were close to the tiller, and all behaving with the most exemplary obedience, until the vessel went down all at once, and probably within half a minute after we had seen the bank for an instant. Lieutenant Lynch, who was at my elbow, dived out under the starboard ridge-rope at the moment when there was about four feet water on the deck, and I had the good fortune to get clear in the same manner (through the larboard side), and also to take a direction which brought me to the

land, without having seen anything whatever to guide me through the darkness worse than that of night.

Colonel Chesney to Sir J. Hobhouse.

'When it cleared a little, I found around me Lieutenant Lynch, Mr. Eden (both greatly exhausted), Mr. Thompson, the Messrs. Staunton, and several of the men; the hurricane was already abating fast, and, as the distance from the vessel to the shore was very short, we indulged the hope that the rest of our brave companions had reached the bank lower down. For an instant I saw the keel of the "Tigris" uppermost (near the stern); she went down bow-foremost, and having struck the bottom in that position, she probably turned round on the bow as a pivot, and thus showed part of her keel for an instant at the other extremity; but her paddle-beams, floats, and parts of the sides were already broken up, and actually floated ashore—so speedy and terrific had been the work of destruction.

'From the moment of striking the bank until the "Tigris" went down, it scarcely exceeded eight minutes, whilst the operation of sinking itself did not consume more than three minutes; indeed, the gale was so very violent, that I doubt whether the most powerful vessel, such as a frigate, could have resisted, unless she was already secured to the bank; and for this, in our case, there was little or no time, as it was barely possible, in the position of our consort, to make fast and save the vessel.

'I had little or rather no hope that the "Euphrates" could have escaped; but the intrepid skill of Lieutenant Cleaveland and Mr. Charlewood enabled them to get out two anchors in the very nick of time, and by the

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Colonel Chesney to Sir J. Hobhouse.

united means of two hawsers, and the engines working at full speed, the vessel maintained her position at the bank until the storm abated (as the enclosed letter from Captain Estcourt* will explain more fully); and as it required all the power of a 50-horse engine in the case of the "Euphrates" to keep her hawsers from snapping, I infer that the 20-horse of the "Tigris" would not have been sufficient to enable her to keep the position of the bank, even if the officers had succeeded in securing her alongside of it.

'Lieutenant Lynch and Mr. Eden continued cool and collected to the last minute, nor were any efforts wanting that skill or presence of mind could suggest, to save the vessel in the first instance, and the lives in the second, when the former had failed; nor could anything be more exemplary than their conduct, and that of all on board. Scarcely a word was spoken, not a murmur was heard; and death was met with that exemplary degree of intrepidity and resignation which have been displayed by every individual throughout the arduous and trying service in which we have been engaged since January 1835.

'Having already given a faithful account of the short but eventful period (of about twelve minutes) occupied by the beginning, progress, and termination of the hurricane, I will conclude the painful part of my task by referring you to the enclosed return of the names of the valuable men who have been lost to His Majesty and their country for ever. Very different was the result when a similar and less violent gale sent my little vessel to the bottom of the river in 1831,† for I had not

* Dated May 26. † See p. 92.

Colonel Chesney to Sir J. Hobhouse.

then the misery of deploring the loss of a single life, and my little schooner was again afloat, and continuing the descent, in less than twelve hours; whereas all our efforts have as yet failed even to find the remains of the vessel; not a ripple or the slightest trace of the unfortunate "Tigris" marks the spot where she went down. But our search has not yet terminated, and if she should be found without having been dashed to pieces, I shall take measures to recover her, with the assistance of the diving-bell and other means, especially as there are very valuable instruments on board, in addition to the hull and machinery, and more particularly as the Arabs are well-disposed.

'I am happy to say that the survivors of the Expedition remain as much unshaken as ever in their confidence regarding the final success of the undertaking, as well as the manifest advantages, facilities, and cheapness of this line of communication. The hurricane has been, it is true, a most trying and calamitous event; but I believe it is regarded by all, even at this early day, as having no more to do with the navigation of the Euphrates in other respects, than the loss of a packet in the Irish Channel, which might retard but could not put an end to the intercourse between England and Ireland.

'We are therefore continuing our descent and survey to Basrah; hoping not only to bring up the mail from India within the specified time, but also, if it please God to spare us, to demonstrate the speed, economy, and commercial advantages of the River Euphrates, provided the decision of Ministers shall be, in the true spirit of Englishmen, to give it a fair trial, rather than abandon

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the original purpose in consequence of an unforeseen and, as it proved, an unavoidable calamity.

Colonel Chesney to Sir J. Hobhouse.

'I have, &c.

(Signed) 'F. R. CHESNEY, Colonel,
'Commanding the Euphrates Expedition.

'The Right Hon.
'Sir John Cam Hobhouse, Bart. and G.C.B.'

Letter from Captain Estcourt to Colonel Chesney.

'"Euphrates" Steamer, Anna, May 26, 1836.

Captain Estcourt to Colonel Chesney.

'SIR,—The very unexpected nature of the hurricane in which this vessel was taken on Saturday last, the 21st instant, and the extreme violence with which it was accompanied, renders it necessary that I should acquaint you with the circumstances as they affected this vessel; and that I should lay before you the conduct of Lieutenant Cleaveland and Mr. Charlewood, to whose united exertions and skill, supported by the active exertions of a most willing crew, added to the great power of the engines with which this vessel is propelled, her safety is to be attributed.

'Scarcely had we cast off from the bank—where, at midday on Saturday last, we, in company with the "Tigris," had stopped to take in wood—when a dense cloud of dust was seen to rise high into the air on the right bank; for some minutes it was doubtful whether it would not pass off to our right, but soon it was apparent that it would be otherwise. Preparation was made to meet the squall, by furling the awning, &c. As soon as the "Tigris," which was leading as usual, had cleared a reef of rocks, at this season far under water, she

* This letter being Captain Estcourt's, I think it better to leave it as it was written by him.

Captain Estcourt to Colonel Chesney.

made a signal to choose a berth and to make fast; hardly was the signal answered when the gale began. The "Tigris" was rounding to, to bring up to the left bank; the "Euphrates" followed; but as we neared the bank, I saw that the Tigris could not stem the gale and current; she had failed to make the bank, and was falling off with her head outwards.

'The "Euphrates" was compelled to back her paddles to give room—an operation, as you will at once see, full of danger, for it could scarcely be expected that she would afterwards be able to gather way upon herself against the violence of the elements and current. However, the "Tigris" having passed across our bows, we worked our engines with all their power. The vessel took the bank with some violence, but did not recoil off; instantly Mr. Charlewood was on shore, followed by many men, bearing a hawser and light anchor. Within a few seconds, a second anchor and chain-cable had been got ashore, and these were followed rapidly by a second chain-cable and anchor. Lieutenant Cleaveland kept the engines working the whole time, notwithstanding which the vessel drove; however, the gale was soon over, and the vessel safe.

'The density of the cloud of dust excluded from my view the "Tigris" from the moment she crossed our bows. Mr. Fitzjames, in the midst of the storm, reported to me, first, that she was upset, and then that she had gone down. As soon, therefore, as our own dangers had ceased, and that the "Euphrates" was secured, I sent off Lieutenant Murphy, to render what assistance he might be able to the crew of our consort, whilst Mr. Charlewood pressed me to allow him to go by boat; this I did as soon as it was safe.

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Captain Estcourt to Colonel Chesney.

'Of the remainder of the melancholy tale of the total loss of the "Tigris," and the few who escaped to find a shelter on board the "Euphrates," you are yourself well acquainted. I have only to repeat, that to Lieutenant Cleaveland and Mr. Charlewood, and indeed to the whole crew of the "Euphrates," the highest praise is due.

'I have, &c.

(Signed) 'J. B. BUCKNALL ESTCOURT,

'Captain 43rd Light Infantry.

'Colonel Chesney, R.A.'

Names of those who perished in the 'Tigris.'

Return of Officers and Men belonging to the Euphrates Expedition who were lost by the sinking of the 'Tigris' Steam-vessel during a violent hurricane on May 21, 1836.

RANK AND NAMES.	REMARKS.
Lieut. R. B. Lynch	21st Bengal Native Infantry (Passenger).
Lieut. Robert Cockburn	Royal Regiment Artillery.
Mr. Yusef Sader	Interpreter.
Mr. John Struthers	Engineer.
Acting Sergeant Richard Clark	Royal Regiment Artillery.
Gunner Robert Turner	
„ James Moore	
„ Thomas Jones	
„ James Hay	
Private Archibald M'Donald	Royal Sappers and Miners.
Benjamin Gibson	Seamen.
John Hunter	
George Liddel	
Thomas Batty	
Thomas Booth	
Abbo	Natives.
Wasoo	
Jacob John	
Mauneh	
Pedros	

(Signed) H. BLOSSE LYNCH, Lieut. Indian Navy.

Extract of a Letter from Sir John Hobhouse to Colonel Chesney, dated India Board, 1st June, 1836.

Sir J. Hobhouse to Colonel Chesney.

'I HAVE received your letters of the 18th of March and the 16th April, with their enclosures.

'They have been submitted to the King, and have afforded to His Majesty the highest satisfaction; I may say the same both of my colleagues and myself, and I trust that you and the officers under your command will believe that your exertions are fully appreciated by His Majesty's Ministers.

'My last instructions directed you to terminate your labours by the end of next July, as by that time all the funds already granted by Parliament, as well as those for which it is my intention to apply, will, according to the estimate with which you have furnished me, be exhausted; but as your last letter informs me that during the month of July you will be employed in ascending the river, I am not willing to bring the Expedition to a close until you have completed the enterprise, and I have therefore now the honour to inform you, that you are authorised to continue in your command, and pursue the objects of your mission, until the end of January next (1837).

'By this arrangement you will have ample time to complete the surveys of the river, and to repeat (perhaps more than once) the ascent to Port William.'

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The following was the reply to my despatch of May 28:—

Letter from Sir John Hobhouse to Colonel Chesney.

'India Board, July 29, 1836.

Sir J. Hobhouse to Colonel Chesney.

'SIR,—I have the honour to acknowledge the receipt of your letter, with the enclosures, dated May 28, 1836, from Anna, conveying to me the afflicting intelligence of the loss of the "Tigris." I scarcely need assure you that His Majesty's Ministers most sincerely deplore the loss of the brave men who perished on that occasion, and that they sympathise with you in deeply regretting that so great a calamity should have occurred at a moment when the complete success of the enterprise seemed all but certain.

'I have also to convey to you the King's condolence on this melancholy event: I am commanded by His Majesty "to assure you of the deep and heartfelt concern with which he has learned the serious disaster which has befallen the Expedition;" and I am further commanded to say the King "cannot express in terms too strong his sense of the extraordinary and admirable exertions and presence of mind which were displayed by all concerned on this trying occasion, or his admiration of the firmness and exemplary resignation with which those whose death he and their country have to deplore met their fate. His Majesty sincerely rejoices, however, at your providential escape, and that of Lieutenant Lynch; and he gives the credit which is so amply due to you, on whom rest the conduct and responsibility of the enterprise, for the strength of mind and the perseverance which every part of your despatch breathes, as His Majesty

Sir J. Hobhouse to Colonel Chesney.

does also to your gallant and zealous associates, for the corresponding spirit which rises superior to difficulty and danger."

'Having thus conveyed to you, in His Majesty's own words, the King's sentiments on this occasion, I have to add that His Majesty's Government wish to express to you their entire approbation of your conduct; and, although the official account of the formal examination into the causes of the disaster has not arrived, that they are fully satisfied that every possible exertion was made to prevent the catastrophe. I beg you also to believe that you have determined wisely, and in accordance with the spirit of your last instructions, in resolving not to abandon the enterprise, but to attempt the further descent and reascent of the river with the remaining steam-vessel.

'In order to afford every facility for the transmission even of a second mail, should you be so fortunate as to make two ascents from Basrah to Bäles, I have this day requested my Lords Commissioners of the Admiralty to direct the Admiral at Malta to send the "Tartarus" or some other vessel to the Orontes or Alexandretta a second time, there to await the chance of your repeating the experiment; and I beg to add, that you may entirely rely on receiving every support and encouragement which may be required for a fair trial of the great enterprise in which you are engaged.

'I request you will communicate to the officers, and to the others under your command, the extreme satisfaction entertained by the King's Government at every part of their proceedings.

'I have, &c. (Signed) 'JOHN HOBHOUSE.'

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'August 2.

Despatch of the 'Tartarus.'

'The Lords of the Admiralty have this day signified to me their compliance with my request respecting the second voyage of the "Tartarus" to the mouth of the Orontes.—(Signed) J. H.'

The following despatch to the President of the India Board made known the completion of the descent of the River Euphrates:—

Letter from Colonel Chesney to Sir John Hobhouse.

'Basrah, June 19, 1836.

Colone Chesney to Sir J. Hobhouse.

'SIR,—The accompanying letter makes known the arrival of the "Euphrates," steamer at Kurna yesterday afternoon, as this one will do the completion of the descent and detailed survey, as far as this city, without anything whatever to regret, except the calamity which befel the "Tigris," and rendered the best efforts of our men useless. But the Expedition is still quite as efficient as you could desire; and having this day terminated our labours for the present, I could not refuse the gratification to myself, and all who have supported me so zealously, of firing a gun for each year* that the King has been spared, and long may His Majesty reign over his most devoted subjects!

'I shall not, on this occasion, do myself the honour of making anything like a lengthened report on the state of this river, which is much more favourable in all respects than I had ventured to hold out to Government, or even to hope it would prove.

* The Sultan's, French, and Austrian colours were displayed at the same time.

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Colonel Chesney to Sir J. Hobhouse.

'With one exception, we have not had anything like annoyance from the Arabs, who were, on the contrary, quite ready to supply us with timber, which has been used exclusively since we left Jabar, and they received in return either money or goods in barter. The selection of common Glasgow and Manchester goods was sought with the utmost avidity, so much so that money was discontinued latterly; and it is quite clear that the merchants of England have only to send our manufactures either up or down this river to have a ready sale, and are, as far as I can see, likely to increase to such an extent as will benefit the nation. Nor is it at all difficult to deal with the Arabs. Almost invariably, they either sought our protection or friendship, and in several instances tribute was offered willingly; therefore there is little reason to fear that judicious management would secure peace and quietness throughout all future voyages.

'We are now about to prepare for an ascent with the Indian mails on the 9th of the ensuing month. Depôts of coals, &c. are already placed, and altogether the task will be a light one compared to what we have just effected. No descent or ascent, in future, can be attended with the same degree of difficulty. This vessel came over the ground usually at the rate of twelve miles an hour. The river was extremely muddy, and the shoals extending under the thick water, for some distance above the islands, could not be perceived; added to which the river, owing to a winter of unusual severity, has been falling ever since we left Bäles, and therefore to have run aground might have been fatal; but, happily, the skill and zeal of Lieutenant Cleaveland,

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Colonel Chesney to Sir J. Hobhouse.

assisted by Messrs. Charlewood and Fitzjames, brought the vessel safely through everything; and she will now return with the waters clear, the current more moderate, and the assistance of charts, as well as knowledge of the river, which in reality is all that was wanting.

'I have the honour to be, &c.,

(Signed) 'F. R. CHESNEY.

'The Right Hon.

'Sir John Cam Hobhouse, Bart. and G.C.B., &c.

'President of the Board of Control, &c., &c.'

Memorial at Basrah.

At the British Residency of Marghil, near Basrah, a memorial of the loss of the 'Tigris' has been erected and placed in the quadrangle, with an inscription setting forth the names of those who perished and the account of the disaster. The author has been informed of this gratifying circumstance by Mr. D. H. Workman, late of Bombay, who saw the memorial when at Basrah during the Persian campaign of 1857.

CHAPTER XV.

DESCENT AND SURVEY CONTINUED, FROM ANNA TO BASRAH.

Departure from Anna.

THE officers of the lost 'Tigris' were now on their way to England, carrying despatches to the Home Government; and we had restored our remaining steamer to a state of efficiency by May 31, and resumed the descent of the river on that day. We passed between the left bank and the string of islands lying opposite to Anna, which at this date extended for at least three-and-a-half miles along the river, and then brought up to receive some stores from the town, which were coming off in our own boats.

Strange effects of ague.

During the delay thus occasioned, Mr. Ainsworth and I set off to explore ancient Anna. While so employed I had an attack of ague, which at that time returned periodically on alternate days, and one peculiar symptom of which was a total loss of memory on my part. While these attacks were upon me I could not remember my own name, nor the termination of any word that I was in the act of writing when the fit came on; and poor Ainsworth also suffered from this infirmity. Seeing that the attack was imminent, he urged my return on board, with which I complied; and finding that our stores had arrived, I gave the word to start, and we steamed down the river, without the faintest recollection on my part that one of our number had been left behind.

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We had a rapid run of 67 miles, steaming during the earlier part of the day, along that extraordinary sweep made by the river, almost in the form of a circle, between precipitous hills as far as Fat-Hat-Huddhr-Elias, which I have already described.* I could scarcely however, by any description, give an idea of the interesting and varied scenery through which the voyager on the Euphrates passes between that singular spot and the town of Hadisa. The picturesque islands—the richly-wooded banks—the frequently recurring villages peeping through the trees, alive with busy men and women clad in the graceful Arab costumes, with the elegant aqueducts and creaking waterwheels—all combine to form a series of pictures scarcely to be equalled on any river in the world.

Scenery about Hadisa.

Hadisa stands on one of the above-mentioned islands, and here we brought up. Dinner followed, as usual, when our day's work was over, and in passing by Ainsworth's cabin-door, I tapped, as was my custom, to let him know that it was ready—when, for the first time, I recollected that I left him absorbed in the round tower and other ruins of Anatho! The fact that he was now some 68 miles behind us, without food, clothes, money, or any resource save active limbs and an undaunted spirit, caused me painful anxiety. My first impulse was to steam back again, but, considering that this course would occupy two days, and that we might miss our geologist at one of the bends of the river, I decided to send a messenger to meet him, and to remain where we were until we should hear of him. To our great delight, he reappeared on the following day. As

Mr. Ainsworth missed.

* Page 73.

soon as he realised that he had been so unexpectedly left behind, Mr. Ainsworth determined to follow us as fast as he could, trusting to his own walking powers, and to our discovery of his absence, instead of looking to the people of Anna for any help. Starting at once, and crossing from one bend of the river to the other, and thus gaining considerably both in time and distance, he caught us up at Hadisa, without having met with any more serious disaster than that of having had to part with most of his clothes and all his little stock of money, to satisfy the cupidity of the plundering people, who constituted themselves as his guides for the sake of enforcing *a reward*. From others, however, he met with much kindness and assistance during his solitary walk, and they cheered him by the intelligence, that he would find the steamer at the next reach of the river, 'whither she had come,' they said, 'with the swiftness of a bird,' and where he was most warmly welcomed by us all.

Mr. Ainsworth follows on foot,

and rejoins us at Hadisa.

The moment we had Mr. Ainsworth again safely on board, we got up steam, and soon left Hadisa with its magnificent date-groves far behind us. The river was now at its highest level, and a far nobler stream, therefore, than when I first saw it from my raft in January 1831. Its course was much less winding than it had been above Hadisa. About two hours' steaming, at the rate of 13½ knots an hour, brought us to Jibba, which stands on an island, and which had suffered so severely from a recent storm, as to be partially in ruins. The scenery between Jibba and Hadisa was decidedly pretty—the country being well-wooded and carefully irrigated as usual.

Width of the river.

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Bend of the river at Hajji-el-Karaf.

Next morning, soon after leaving Jibba, we came upon another considerable sweep in the river's course, scarcely less remarkable than that above Hadisa. On reaching the rocks of Hajji-el-Karaf, near the castle of Al-Karaf, it runs directly north for the distance of five miles; and having continued its course in this direction for about ten miles more, it turns abruptly south for nearly five miles, to Maadrēd castle and mills. Thence it winds to the south-east, through wooded banks studded with mills and aqueducts, as far as the town of Hit.

Bitumen springs of Hit.

We arrived at Hit sufficiently early in the day to enable us to visit the celebrated and inexhaustible bitumen fountains of this place. They bubble up from the ground with sufficient force to justify this designation, and the value of the bitumen as an article of trade can scarcely be overestimated. It was used by us largely for the purposes of fuel for the steamer, when sufficiently consolidated by an admixture of earth, and answered every purpose of coal. As cement, its value was well known to the ancients.

Commercial and natural products of Hit.

The salt-pits, the lime-quarries and sulphur-mines, and the long-celebrated tepid mineral springs of Hit, were also all visited by us at this time. The natural productions afford ample and remunerative employment to the people of the town and neighbourhood. The process of boatbuilding at this place has been already described.* The people are such adepts in this trade that a large-sized boat—capable of containing some 20 tons—is often begun and finished in one day, all their materials being found on the spot.

* Page 77; and vol. ii. of 'Expedition to Euphrates and Tigris,' pp. 636, 637.

From Hit I forwarded a letter by messenger to Bagdad, requesting that a supply of money might be sent to meet us at Hillah, and resumed the descent of the river the next morning, leaving the town enveloped, as usual, in as dense a cloud of smoke and bitumen-steam as any of our own manufacturing cities. The river continued broad and deep, and particularly favourable for steam-navigation. The scenery, however, is less picturesque below than above Hit. We had left behind us the aqueducts, and entered on the region of the ugly though equally efficient water-skins. The system of irrigation we found everywhere remarkably complete, and attended with proportionate fertility and luxuriant vegetation. The villages below this point are chiefly built of stone, but occur at rarer intervals than the mud-and-reed structures higher up the river, which here rather increases in width.

Irrigation of the country, and consequent fertility.

At midday we passed Kalat Ramadi, a pretty little town, standing on high ground above the right bank of the river. At this season both its banks are covered with the black tents of the Bedawin, the whole way from Kalat Ramadi to Felujah, which place is 87 miles from Hit by water, the windings of the river being considerable. During the whole of this distance, the Euphrates is extremely favourable for all ordinary navigation, and perfectly safe for a small steamer, with the single exception of the camel's fords of Abū Sisa and Busheab, where the water is rather shallow.

Bedawin encampment.

As it was desirable to connect the City of the Khaliphs with our survey, in addition to the still more important object of obtaining supplies, it was decided that Major Estcourt and our astronomer should go to

Major Estcourt and Mr. Murphy detached to Bagdad.

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Bagdad for these purposes; and they accordingly left us at Felujah, accompanied by Doctor and Mrs. Helfer, and Mr. Charlewood also.

On the morning of June 6, our descent and survey were resumed. We passed the Castle of Macdam, and followed the windings of the river, threading our way amidst its numerous islands, until we reached Musseyēb, 70 miles below Felujah, a town containing about 500 houses. Almost opposite to it is a floating bridge, having a movable centre to facilitate navigation. It was opened for us the next morning as we approached; and we passed through and steamed on—our whole party under the influence of those indescribable feelings attending a first visit to Babylon. The river below Musseyēb increases in depth, becoming somewhat narrower at the same time, and flows between nearly unbroken belts of the most luxuriant date-groves, which almost entirely conceal from view the numerous villages which, at this part of its course, stud both banks. Here and there we could perceive their white buildings, peeping through the thick dark-green foliage. As we approached Babylon, these date-groves became denser and richer, and, but for the occasional life imparted to them by the villages and their inhabitants, would have been monotonous from their continuous line of verdure.

Musseyēb.

Date-groves above Babylon.

Arrive at Babylon.

We anchored at the western part of the ruins, which former experience had taught me was the best point to start from, intending to carry our examinations on as far as Hillah, where we hoped to be joined by the party from Bagdad. We landed therefore close to the Mujellebēh, which we ascended almost immediately,

and afterwards visited and explored every part of the remains of this primeval and once proud city, with the very deepest interest. We sought, but in vain, for the Lions' Den, which I had entered on the occasion of my first visit to Babylon; but its arched and sloping descent had disappeared, and, to our great disappointment, no traces of it remained. The investigations of scientific travellers had taught the people of Hillah the value of kiln-burnt bricks and arrow-headed characters; consequently, those which formed the Lions' Den, when I saw it in 1832, had been carried away and turned into money long since.

No traces of the Lions' Den.

I found this to be the case with other parts of the ruins also. The massive abutments of the Hanging Gardens, and the remains of the Kasr, had both suffered from these depredations. Our whole first day was spent in these explorations, which to me had lost nothing in interest since my previous visit; and the following day was devoted to the remains existing on the right bank, to the north of the town of Hillah, and which have been so much effaced by the effects of time as to be scarcely traceable. This, however, is far from being the case with the famous Birs Nimrúd, which still maintains its majestic appearance on the right bank, at what seems to have been the extreme termination of these vast ruins. We deferred our visit to this—one of the most wonderful of man's works—and to the tower on its summit, until after the return of our party from Bagdad, and then left Hillah, and resumed our descent towards the Persian Gulf.

Destruction of the ruins of Babylon.

Remains on the right bank.

Birs Nimrúd.

We were not, however, to get off quite so pleasantly as we had expected. We had been on very friendly

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terms with the people, and our steamer had been constantly visited by large numbers, both of men and women; but just as we were preparing to leave Hillah, with, as we believed, most amicable feelings on all sides, a sudden and unexpected change took place. Dr. Ross, who had travelled with our party from Bagdad to this place, came sufficiently near to announce to us, in distinct whisper through his hands as a speaking trumpet, that an attack by the people of the town was *imminent.* Instantly all hands were called to quarters, and our vessel left the bank at once, and steamed through the opening of the bridge, just as Hasr Hassan, one of our engineers, appeared on the bank pursued by 60 Arabs, plunged into the river, and swam off to us. He brought the intelligence that a large number of the inhabitants were collected in an adjoining street, not only armed, but in a state of great excitement.

Sudden hostility of the people of Hillah.

Unexpected tumult.

We were in total ignorance as to the cause of this outbreak, and thought it advisable to take some means of ascertaining whence it arose, our own safety being now secured. We therefore lowered a boat, and sent Major Estcourt and Mr. Rassam to the governor, to demand an explanation of this *contemplated* attack; for, seeing that we were well-prepared, not a man had yet dared to fire upon us. It now came out that one of our Arab pilots, who had left the vessel, instead of performing the duty for which he had been engaged, had spread the report that his companion was forcibly detained on board, and a cry 'To arms!' was the immediate consequence of this story. The governor assured Major Estcourt that this tumult was quite opposed to his wishes, and was reminded, in return,

Boat sent for intelligence.

The governor's apology.

that it was his duty to restrain a lawless mob, and that, if our defensive preparations had not kept them quiet, he would have been answerable to the Sultan for any bloodshed that might have ensued. Our ambassadors then returned on board, and we left Hillah, our anxiety relieved as to our actual and future friendly relations with this fiery and excitable people.

Major Estcourt's reply.

At 9 A.M. on June 11, we were steaming towards the sea, between rich gardens and plantations of mulberry, fig, and pomegranate trees, with the Birs Nimrúd in view at some little distance from the right bank. The surrounding country was much flooded. Date-groves still constituted the principal vegetation of both banks, as far as Dewanyah, a town of some size, 69½ miles below Hillah. Here we obtained a supply of wood, which delayed us until the 13th, when we passed, after frequent windings of the river, the canal leading from the right bank to Old Lamlum. The body of water was necessarily a good deal diminished at this place, the river being partially lost in the marshes.

Departure from Hillah.

Dewanyah.

Lamlum marshes.

We brought up at New Lamlum in the afternoon, a town containing a numerous population dwelling in prettily-constructed reed-huts—which are portable, and which had almost all been removed from their usual sites, on account of the floods, when I first visited this place.

New Lamlum.

Here the channel of the river narrows to a width of from only 100 to 150 yards; and we found it already occupied by numerous boats and some small vessels, one of which measured 55 feet long by 22 feet beam, which caused additional difficulties to our navigation.

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Boats and canoes.

We observed also a great many canoes of very light build, and coated with bitumen, which are used for taking the inhabitants from house to house, and are paddled with great ease and swiftness by one man.

The Shiahs a Persian sect.

My experience of the Shiahs, in 1831, caused us to be greatly on our guard whilst we were among them. They are of Persian origin, and still retain many characteristics of their ancestors, who quitted Persia at a very remote period. Their descendants have ever since occupied their present isolated position in the midst of the Lamlum marshes. On our arrival, we opened intercourse with them by barter, of which they eagerly availed themselves; but this had also, unfortunately, the effect of arousing their cupidity to a great extent, and led them to all kinds of attempts to get possession of more than was intended for them.

Their thieving propensities.

A clammy oppressive heat, and swarms of mosquitoes of unusual size, caused us all to sleep that night on deck, with the exception of Major Estcourt, who had made his shake-down on the adjoining bank. We had three sentries on the alert, and therefore felt secure from all surprise and depredations. Towards morning, however, we were roused by a shot, followed by a wild scream; then another shot, telling us there must be some cause for alarm. In a moment all were at their posts, and we soon ascertained that Madame Helfer's scream and alarm had been caused by her feeling that she was being dragged away, by (as she supposed) a lion, or some ferocious beast of prey. No traces of any animal were, however, to be seen; but the mystery was soon explained by Major Estcourt, who had been awakened by the attempts of a thieving Shiah to draw

Madame Helfer's alarm.

away the clothes on which he was sleeping. He sprang up and fired his pistol at the man, as he was making off; and immediately afterwards discharged a second shot at another fellow, whom he saw making his way among the sleepers on our deck, and who was over the side in an instant. This clever and active Khezail had crept into the vessel under the cover of her overhanging stern, and had thus escaped the vigilance of our sentinels, with the intention of supplying himself comfortably while we slept; but on hearing the shot, he made his escape with all speed, luckily carrying off nothing but Fitzjames's watch—for he failed in his attempt to pull away Madame Helfer's cloak, or to steal the chronometers, which he had also evidently intended to appropriate.

The thief discovered.

The next morning (June 16) we took the necessary steps with the chief of the Khezail to ensure the restoration of the watch, and then steamed off through the bazaars and remaining habitations of this singular people, which lined the river's banks. We passed several villages of mud-huts, and reached, though with increasing difficulty, the island of El-Wuja, a little beyond which we ran aground.

El-Wuja island.

We ascertained by our own examinations, as well as by information obtained from the natives, that we had, unfortunately, taken the least favourable channel through the marshes. We therefore retraced our course early the next morning, for a short distance, to a spot near the village of Barblyah, to which we had given the well-deserved name of 'Mosquito Station.' Here we got into the more navigable and better channel, and made our way without further difficulty.

Want of water.

Find a better channel.

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We passed to the right of Kalish Castle, and a little later saw the river of that name, as well as the Um-der-Khan, and farther on the castles of Muwaserah and Matemah (or Maturah). The latter is on the left bank, and a little to the north of it stand some fine ruins, which reminded me of the Mound of Sus. They bear the name of Irak-Jakah-el-Assayah (place of pebbles), and are supposed to mark the site of one of the primeval cities —that of Erech.

Ruins of Irak-Jakah (once Erech).

At this part of the river many places of interest follow rapidly on one another. Karra Castle, which we passed on the left bank, was succeeded by the saint's tomb of Medekim. Serayah inlet, coming from Samawah, followed, and a little farther down, Karmallah Castle. Kereth Castle, and inlet through the left bank, were passed next, and finally Kerayim Castle, which stands on a considerable arm of the Euphrates, bearing the same name. Here the three branches of the river, which divide and flow separately from the town of Lamlum, reunite; and the marshy flat of this portion of its course is succeeded by a varied country, while the stream itself again becomes deep and wide, and flows between moderately high and well-wooded banks as far as El-Khudhr, which we had fixed on as our halting-place.

Karra Castle.

Karmallah Castle.

The three branches of the Euphrates reunite.

El-Khudhr.

The village of El-Khudhr stands in the midst of an extensive grove of poplars, and, as we required fuel to carry us to Basrah, the inhabitants were employed in cutting wood for us during the evening of our arrival, and the following morning. But when called upon to resume their work during the day, we found a decided unwillingness on their part to fulfil

Drawn by Lt. Col. Estcourt.

Day & Haghe Lith.rs to the Queen

AL-KHUDHR VILLAGE AND ARAB WAR DANCE.

their engagement; and Lieutenant Murphy, who was employed in taking sights in the Castle of El-Khudhr, sent us word to be prepared for an attack, of which Lieutenant Cleaveland had also perceived symptoms; for the people had not only refused to continue their work, but were seen preparing their muskets, swords, knives, and other arms. Ignorant of any possible cause for hostility, Seyd Ali went to the chief of the tribe (the Beni-Hakem) for an explanation; but the only reply that he could obtain was that we were cowards, and the assurance, coupled with the most opprobrious epithets possible, that if we did not depart instantly, their allies, who had been summoned to their aid, would join them in attacking us. Seyd Ali therefore returned to us with the intelligence, that the whole population of the place was in a state of violent excitement, which was evinced by their commencing their war-dance, moving round and round in a circle with joined hands.

Hostility of the people.

Insolence of the chief.

Arab war-dance.

Mr. Ainsworth was on shore at this time, collecting botanical specimens in the adjoining wood, when we perceived that the Arabs were preparing to seize him. I and several of our party instantly landed, and throwing ourselves between him and the excited crowd, we held them in check, and protected him, until he, and the rest of our party also, safely reached the steamer. Once on board, we might easily have left the Arabs to themselves, had we not felt that our moral influence would have suffered from such a course. Instead of retreating, therefore, we steamed directly up to the wood on the northern side of the town, where the mass of the tribe had by this time

Rescue of Mr. Ainsworth.

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assembled, in the hope of finding some opening for negotiation.

Encounter with the Arabs.

Instead of this we were received with a heavy fire. Fortunately, none of our party were struck, although Lieutenant Cleaveland, who occupied his usual position on the paddlebox, was much exposed. Our bulwarks, &c. were otherwise almost a complete protection. Our people burned to return this attack, and it was with difficulty that I restrained them for the moment, in the hope of preserving peace; but as a dropping fire was still kept up against us, notwithstanding our forbearance, we discharged a broadside of grape and canister into the wood, with telling effect. Still the Arabs continued to fire at us, and we gave them a

Attack from the castle.

second discharge, which cleared the wood at once, after some consultation on their parts. An attack had also been made upon us from a castellated building on the opposite side of the river, but the discharge of a Congreve rocket and two or three Cohorn shells

Its hasty evacuation.

caused its immediate evacuation; and some hundreds of an adjoining tribe of Arabs were seen scampering away, to the infinite delight of Madame Helfer, who, contrary to my orders, came up the companion-steps to see what was going on.

Leave El-Khudhr.

This was the only affair attended with hostility on the part of the people, which occurred throughout the whole Expedition. We had to quit El-Khudhr without having any opportunity of obtaining an explanation

Explanation of the affray.

of their conduct from the Beni-Hakem. We were afterwards told that their hostility had been aroused by our having (in ignorance of their superstitions) cut down a part of the wood, which, owing to their Persian descent, they regarded as sacred.

The river below El-Khudhr was literally covered with boats, indicating commercial activity, and presenting a great contrast to the quiet waters through which we had passed for so many days higher up the stream. Here, on the contrary, there was a very considerable population, and much life and activity about Kut-el-Amrah, which is the principal seat of the great tribe of the Montefĕk Arabs, who inhabit both banks of the river, dwelling amidst groves of fine date and pomegranate trees.

Kut-el-Amrah.

Eight miles below Kut-el-Amrah, and 75 miles from El-Khudhr, is Sheikh-el-Shuyukh, the commercial capital, and the largest town which is permanently occupied by the Arabs on the Euphrates. It contains some 1,500 clay-built houses, and as many tents, situated on the right bank of the river, and is most pleasantly shaded by vines, fig and pomegranate trees, interspersed with rose-bushes, &c.

Sheikh-el-Shuyukh.

A gun was fired from the steamer at sunset to announce our arrival, and again at sunrise the next morning as a compliment to the place. A supply of wood, for which we had made an arrangement on our arrival, was immediately placed on board; and we prepared to start early the next morning, in the full expectation of completing the descent of the Euphrates, and bringing up at Kurnah in the evening. In point of distance this was quite feasible, the river being both deep and wide; but this being also the flood-season, the extent and turbid condition of its waters caused us some difficulty, at certain places, in making out the channel. Occasional villages and magnificent groves of date-trees guided us pretty well, and we

Last day's steaming.

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accomplished the 75 miles to Kurnah in 7½ hours, and brought up in the evening at the junction of the Euphrates and Karūn, and alongside the date-groves of Kurnah—for the town itself is completely hidden by these trees. The dates of the Euphrates are celebrated throughout Arabia and other parts of the East, but those of Kurnah and its vicinity are specially large and delicious, and justly prized. The dates usually imported to this country give no idea of the excellence of those grown on the lower part of the Euphrates, which, with a little rice, form the principal food of the inhabitants.

Arrive at Kurnah.

Dates of the Euphrates.

But to return to Kurnah. We found a square or ark-like-looking vessel * lying at anchor off the town. She proved to be a Turkish man-of-war, and we consequently exchanged one gun, in accordance with the usual Turkish custom, and anchored.

The descent and survey of 1,153 miles of the great river was thus completed. It now remained for us to follow the joint estuary of this and the sister stream to Basrah, which, under the name of the Shatt-el-Arab, is so deep and wide that it has been ascended by one of our second-rate line-of-battle ships.† Almost the whole of our fuel had been consumed in reaching Kurnah, consequently it took us five hours to reach

Descent and survey completed.

Shatt-el-Arab.

Reduced speed.

* Ark, according to Bailey's excellent dictionary, signifies a large chest, which this vessel resembled.

† The 'Lion,' of 64 guns, in 1800. During the Persian war in 1857, a fleet of the largest Indiamen ascended the Shatt-el-Arab, carrying the force under General Outram and Havelock, which bombarded and captured Mohammerah; and such was the depth of water in the river that a vessel of the size of the 'Eastern Monarch,' of about 2,000 tons, could lie alongside the bank, and take troops on board without the assistance of a boat.

Lt Col. Estcourt 43rd L.L. del. G. Hawkins, Junr lith.

Day & Haghe Lithrs to the Queen

KÚRNAH.

Basrah, a distance of only 43 miles, with the reduced power, which was all that we could keep up, even by burning empty casks, and any other available articles that could be spared for fuel. The roadstead of Basrah presented what was now to us a novel scene. In addition to many smaller vessels, there were two Indiamen at anchor, besides a most unpromising-looking 20-gun ship, bearing a Turkish admiral's flag at the main.*

Arrive at Basrah.

We had now accomplished the entire descent, as contemplated by Government, and most prosperously, with the single exception of our great calamity above Anna; and it was with warm and grateful hearts that we endeavoured thankfully to acknowledge, in this distant part of the world, the effective support which had been given to the Euphrates Expedition. Taking the precaution, therefore, to place the chronometers astern in one of our boats, to avoid concussion, and hoisting the royal standard, a gun was fired for every year that our gracious Sovereign William IV. had been spared to his devoted people. This commemoration of our arrival, and of our gratitude, was followed by visits and sincere congratulations on all sides—including the Turkish Admiral, the French Consul (M. Fontanier), and the captains of the vessels in port, who offered us anything they had in the way of supplies. Many of the inhabitants of Basrah came also to see the wonderful little vessel, which had, as they truly said, come more than 1,500 miles through wild and hostile Arabs.

Commemoration of our safe arrival at Basrah.

As, in conformity with our instructions, we were to

* This man-of-war was not expected, nor indeed in any case prepared, to go to sea, and it was said that one of her bulkheads had been replaced below the deck by a brick wall.

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Preparations for ascending river.

ascend the Euphrates with the Indian mails, the more urgently necessary repairs of our vessel, and the establishment of depôts of fuel at certain places along the river, at once received our immediate and serious attention.

Basrah dockyard.

The Turkish authorities had kindly placed the dockyard of Basrah at our command, and we naturally expected to find there all that would be requisite for the repairs of the steamer. But, although our wants did not lie in books, as in the case of Gil Blas's legacy from the Bishop, our hopes were as effectually disappointed. There was, in fact, but little prospect of getting our requirements supplied at this port, and we had to solve the difficult question of how and where this could best be done.

CHAPTER XVI.

CROSSING THE PERSIAN GULF TO BUSHIRE — REFITMENT OF THE STEAMER, AND RETURN TO THE LOWER EUPHRATES.

THERE were, in fact, no means of refitting the steamer at Basrah; consequently, our only alternative was to proceed to Bushire for this purpose, which, with a steamer only suited for a quiet river-navigation, presented an almost insurmountable difficulty. It was indeed felt to be so by us all, but more especially by our naval officers, who assuredly were not wanting in enterprise; yet, as there were no other means of completing our undertaking, it was decided, after much serious consideration, that the attempt to reach Bushire in our little 'Euphrates' should be made.

Descent of the Shatt-el-Arab from Basrah.

We moved down the Shatt-el-Arab on the afternoon of June 21, leaving Major Estcourt and Lieutenant Murphy at Basrah, to ascertain the magnetic dip as well as the precise astronomical position of the city. The weather was not very favourable, and we brought up during the night near the mouth of the river, and took the precaution of putting up the dead-lights, and securing the windows, which were very little above the water; and thus we passed the bar, about noon next day. Under the impression that there was some danger, our course was shaped along the Persian coast, the vessel rolling

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most uncomfortably all the while, as might have been expected from a construction so totally unsuited for the open sea.

Inefficient pilots.

We had two pilots on board, who were supposed to know every part of the coast; yet, without giving us any kind of warning, we suddenly found that we had passed from deep soundings to only five feet water; and

Dangerous breakers.

in an instant, we were in the midst and backing out of breakers, with one dead-light stove in, and another injured. We had, in fact, narrowly escaped running

Off the River Indián.

upon a bank near the estuary of the River Indián, where all might have been lost, had we not seen the breakers, which we did not do until *almost too* late. Having placed below all the weights, guns, &c. which were not required on deck, to lessen the rolling, and secured the windows, dead-lights, &c., we steamed

Arrive at Bushire.

direct for Bushire, with a fresh wind, which however, in our case, still gave sufficient cause for uneasiness, till on passing the island of Karrak the sea became calm, and we steamed with smooth water on to Bushire.

War vessels in the roadstead.

We found a frigate belonging to the Imám of Muscat, and other large vessels, anchored in the roadstead, as well as two cruisers of the Indian Navy, the 'Amherst' and 'Cyrene,' from both of which we were greeted by hearty cheers as we passed to our anchorage close to the Residency, where Captain Hennell now heard for the first time of our successful descent of the Euphrates,

Salute at Bushire.

and the fatal loss of the 'Tigris.' It was after sunset when we arrived, and the salute was necessarily postponed until the morning; but this compliment was duly paid to us afterwards, not only by two of the Honourable East India Company's men-of-war, but

also by the frigate of the Imám of Muscat, and by two merchant-vessels lying at anchor.

Refitment of the steamer.

We now devoted ourselves to the necessary preparations for our future ascent of the Euphrates. Our vessel required extensive repairs before she could be fit to stem the current, especially after all she had gone through between Basrah and Bushire, while returning to the former place would of itself be a serious trial to her.

Kindness of Captain Hennell.

With regard to our first great object—that of refitting—Captain Hennell at once offered us all the means which the Indian Navy could command, and proposed to send to the station at Bassadore for additional supplies. He also gave us the accommodation of a hulk, the 'Sovereign of the Seas,' on board of which we immediately removed ourselves, and everything belonging to our vessel; and with an additional supply of smiths and carpenters, we set diligently to work, knowing beforehand that we had a serious task to accomplish. The deck required caulking; repairs were needed to the floats, paddle-wings, and also to some part of the engines; and one very important object was to manage a more effectual way of closing the windows, which work, in addition to the painting, was to be completed by the time the 'Hugh Lindsay' should appear to tow us, as we expected she would do, across the Persian Gulf.

Remove on board a hulk.

Repairs required.

To be towed by the 'Hugh Lindsay.'

But, in the midst of these occupations, a great and very unexpected difficulty arose. Our seamen, having experienced the change from a life of over-exertion to one of almost idleness, lost that energetic feeling which, without any exception, had hitherto prevailed among

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them; and the consequence was that, on July 4, Lieutenant Cleaveland reported that they claimed their discharge, in conformity with the articles of agreement. It now appeared that the dangers experienced in crossing the Persian Gulf had first led to the desire to end their service; and I found, with much disappointment, that three of the artillerymen also wished to quit us, and return to England. This was a serious trial, and the more so as it had come when we were fast preparing the steamer for the completion of her task by the ascent of the river.

The seamen claim their discharge.

Difficulties entailed by this demand.

Still, I came to the conclusion that the case was not altogether hopeless, and I therefore took the course of making known to all our men, that about five months more would accomplish our enterprise; and that if they quitted us now, instead of finishing their undertaking, they must do so with their own means, since their pay would cease on their leaving us; while, as regarded the danger of reaching the river, I had made provision for this reasonable cause of alarm by arranging that our seamen should be taken on board the vessel destined to tow our steamer to the Euphrates—adding that other seamen could be obtained, should they keep to their resolution of returning home.

My decision respecting the seamen.

After some hesitation, several of our seamen, and nearly all the natives, persisted in their wish to be discharged; and on their formal application to this effect, the Resident consented to take steps to supply their places. With a view to the accomplishment of this most important object, I went on board the 'Elphinstone' cruiser, and proposed that some of her seamen should join the Euphrates Service, for which, to my great

Seamen discharged.

satisfaction, every man at once volunteered. But as Captain Sawyer did not feel justified in diminishing his crew by more than four, we were promised the remainder of our number on the arrival of the 'Amherst' cruiser, then expected from Bassadore.

The 'Elphinstone' crew volunteer for the Euphrates Service.

In addition to the operation of refitting, and the no less difficult task of obtaining seamen, a Report was now in course of preparation, by myself and each of the officers, on the practicability of navigating the Euphrates; and that no part of the time required for carrying out these arrangements might be lost, it was also proposed to open a temporary line through Turkish Arabia—not by way of Basrah (as in the time of the Marquis Wellesley's Government of India), but by the quicker route of Grane.

Temporary line through Turkish Arabia.

I accordingly crossed the Gulf to the latter place, and made arrangements for opening a communication by this line: after which, having forwarded a despatch by dromedary *viâ* Aleppo, I returned to the steamer, where I had the satisfaction of finding that good progress had been made with her repairs under Mr. Fitzjames, although the assistance given by the native smiths and carpenters had been very inefficient. Our expected supply of coals had not, however, as yet arrived from Bassadore, nor had the remaining number of seamen been obtained from the Honourable East India Company's cruisers. A few days after my return we procured additional assistance in the way of workmen, and our prospects gradually brightened. Supplies came in, most opportunely and unexpectedly, from Bombay, brought by the clipper barque 'Sir Edward Compton,' which vessel had been specially chartered for the

Despatch forwarded *viâ* Aleppo.

Progress of repairs to steamer.

Supplies from Bombay.

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purpose of bringing us supplies with all possible speed. She had made her passage to Bushire in 24 days, notwithstanding the much-dreaded south-west monsoon; and by her we learnt that one mail had been forwarded to us by the 'Shannon' on July 5, for conveyance *viâ* the Euphrates, and that another was to be despatched for us soon afterwards by the 'Hugh Lindsay,' for both of which it was necessary that we should be prepared. An order from the Commodore in the Persian Gulf came by the same opportunity, to furnish us with the requisite number of seamen, and thus one serious difficulty was at an end. That of crossing the Gulf still remained.

Mails from India.

Preparations to recross the Persian Gulf.

We at first thought of accomplishing this by steaming to the mouth of the Indián, and ascending that river. But as this would still have been attended with some, though comparatively slight risk, we decided to give it up, and we finally arranged that the 'Elphinstone' should tow our steamer to the entrance of the Euphrates. All necessary preparations for this were at once commenced. Dead-lights soon replaced our jalousies, and the guns and other heavy weights were stowed below. We were alongside the 'Elphinstone' on July 25, and sent our funnel, and our spare officers and men, on board, only keeping a few volunteers to steer the 'Euphrates,' with Lieutenant Cleaveland, Mr. Charlewood, and myself. The weather was, on the whole, moderate during our voyage, but, owing to adverse winds, it was only on September 1 that our vessel left the 'Elphinstone,' and steamed up the great river to Mohammerah.

Towed by the 'Elphinstone.'

Reach Mohammerah.

Intelligence of Lieutenant Murphy's serious illness

had reached us before leaving Bushire, and this had caused Mr. Ainsworth to hasten to him at once. But before he could have arrived the Basrah fever had deprived the Expedition of the services of that valuable officer and sincere Christian, who never knew what it was to have a personal enemy. His death was on every account deeply felt by us all, but in my own case this sorrow was, if possible, increased by the reflection, that I ought not to have allowed my lamented friend to expose himself (as in his zeal he had done) to the trying climate of the Lower Euphrates.

Illness and death of Lieutenant Murphy.

The intelligence of Lieutenant Murphy's death awaited us at Mohammerah, and we heard at the same time, from Major Estcourt and Mr. Ainsworth, of the dangerous illness of Corporal Greenhill, which induced us to steam at once with all speed to the Residency at Marghil—a distance of 29 miles, which we accomplished in less than three hours against the current—and to return the same afternoon, with the invalid on board, as well as Major Estcourt and Mr. Ainsworth.

Illness of Corporal Greenhill.

Rapid run to Marghil.

We thus ascertained that our steamer had not lost any of her capabilities, and we felt equal to anything that might be required from us. An immediate opportunity for usefulness presented itself. The 'Cyrene' (East India Company's cruiser) had come into Mohammerah without bringing the missing Indian mail from Grane; and, as we could not commence the ascent of the Euphrates without it, we had thus a little time on our hands, which I thought it best to employ, until the arrival of the 'Hugh Lindsay,' in ascertaining the capabilities of the Rivers Karūn and Bah-a-Mishir,

Steamer's capabilities unimpaired.

Rivers Karūn and Bah-a-Mishir.

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both which examinations had been originally comprised in the contemplated objects of the Expedition.

The survey of the river at and above Mohammerah had been already completed by Major Estcourt, and we therefore entered the Karūn on the morning of August 7, and passed the mouth of the Bah-a-Mishir with its splendid date-groves. Steaming upwards, we passed the head of the dry channel of the Karūn-el-Amarah (Blind Karūn), its waters having, doubtless, been absorbed by the canal already described.* We saw occasional tent-villages, and proceeded without any interruption, until a little short of Ismaili, where the water rather failed us; and as we had no time for delay, we did not attempt to pass this shallow place, but steamed back to Mohammerah, after thus completing the ascent of the Karūn, as far as was practicable. It is a fine river, with a depth of $3\frac{1}{2}$ fathoms even in the low season, and with an average width of from 180 to 190 yards. Its banks are partially wooded, and but thinly inhabited, the people preferring the interior of the country, where they are less exposed to the dreaded Aniza Arabs.

Survey of the Karūn.

Return to Mohammerah.

Description of the Karūn.

Having ascertained the navigability of the River Karūn, not only by the body of its waters, but also by the size of the 'bagalás' (large boats with lateen sails), which pass to and fro constantly between it and the neighbourhood of Shuster, we turned with much interest to the examination of the route by which Alexander the Great reached Susa on his return-march from India. With this object we descended the Bah-a-Mishir, and

March of Alexander the Great.

* See Chapter VI. pp. 101, 102.

on finding, from its depth and width, as well as from the size of the passage-vessels, that it possessed every facility for navigation, we steamed back to our station, and were not a day too soon. Lieutenant Daniell, of the Indian Navy, had just reached the Hafar Canal in the East India Company's schooner 'Shannon,' with the mail from Bombay. This caused us some embarrassment, inasmuch as the immediate ascent of the Euphrates, for the purpose of carrying forward this mail without delay, would have caused us to miss the larger and more important mail expected by the 'Hugh Lindsay,' and which was just at hand.

Arrival of the Bombay mail.

The alternative of ascending the River Tigris to Bagdad, and forwarding the mail from thence, and then descending the river with all possible speed to meet the 'Hugh Lindsay,' presented itself, and was at once decided on. We hoped by this arrangement to be able to dispose of both mails, provided the River Euphrates should still prove to be navigable at this low season of the year. On this important question, however, doubts existed as to the practicability of a successful ascent, which, after lightening our vessel for this purpose as much as possible, I expressed in a despatch to the President of the Board of Control, stating that, 'if water failed, we should put about without hesitation, after sending the mail on by dromedaries.'*

Decide to ascend the Tigris to Bagdad.

Doubts as to depth of water of the Euphrates.

The delay entailed by the unavoidable repairs of the steamer, and the subsequent detention of the mail from India, had unfortunately thrown us into the unfavourable

* Despatch of August 15, 1836, pp. 41 and 42 of Communications or Despatches, &c., ordered to be printed, February 22, 1836.

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Mohammerah to Basrah.

season for the navigation of the Euphrates; still, it was with confident feelings of success that we steamed from Mohammerah to Basrah, on September 3, to lay in fuel, and make our preparations for ascending the Tigris.

CHAPTER XVII.

ASCENT OF THE RIVER TIGRIS TO BAGDAD, AND DESCENT TO MEET THE INDIAN MAIL AT KURNAH.

Our prospects on reaching Basrah from Mohammerah were, at first, anything but encouraging; for here we lost our only remaining engineer, Mr. Calder, and his death seemed, at first, to put the prosecution of our enterprise entirely out of the question. Happily, however, as is usually the case in all difficulties, an available resource was to be found. It will be remembered that some of the men of the Expedition had received practical instruction in working the engines of the Birkenhead ferry-boats, among whom was Corporal (now Sergeant) Black, of the former Royal Sappers and Miners, a singularly energetic and persevering man. I proposed to him that he should undertake to work the engine, with such assistance as could be given him by our artillerymen—to which he readily consented.

Death of the engineer.

A sapper appointed to work the engine.

Still there was cause for uneasiness; and I should probably have felt even more anxious than I did, if I had not remembered that in the case of the Niger Expedition, when the death of the engineer and his assistants had left the 'Quorra' steamer in an almost hopeless predicament on the Upper Niger, my friend Macgregor Laird not only *undertook* to work the engines himself, but actually did so successfully,

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until he brought his vessel to the sea, and also during her passage home. We therefore determined to go on, under these disadvantageous circumstances, rather than abandon the enterprise; and having procured a pilot who was acquainted with the river, we steamed up to Kurnah on the afternoon of September 14, taking with us the French Consul, Monsieur Fontanier, who had shown great kindness to our lamented astronomer* throughout his illness, and whose state of health rendered a change from Basrah desirable.

Determine to continue the enterprise.

Ascent of the Tigris commenced.

The ascent of the Tigris commenced on the afternoon of September 15, and passing the Tomb of Ezra, we brought up for the night at Janchu, having ascended rather more than 38 miles of river during that afternoon, with an average depth of from 2 to 6 fathoms, and a width of 200 yards. The water was necessarily low at this season, so that we were prepared for some difficulty in the ascent, which, in one or two places, caused us to lose time. Thus we accomplished only 33 miles in $6\frac{3}{4}$ hours to the village of Bistoa. The next day, the river still winding very much through wooded banks, we made our way onwards with less difficulty, the depth varying, as before, from 2 to 6 fathoms. One bend of the river is so exactly like another, that the pilots have to place stones, to enable them to distinguish between the different reaches, to which they give separate names.

Bistoa.

As the river improved in depth, so our progress became more satisfactory, and we made $67\frac{2}{3}$ miles to Ras-al-Kheyran during this day. On the next, finding that we were passing through a more populous district than had hitherto been the case, the Sultan's ensign

Ras-al-Kheyran.

* Lieutenant Murphy.

Gl. Estcourt del. — T. Picken, lith.

Day & Haghe, lith.rs to the Queen.

SALUTE AT BASRAH.

Lt Col. Estcourt, 43 Lt Infantry, del.

Day & Haghe Lith.rs to the Queen

THE TOWN OF KIT ON THE EUPHRATES

was displayed at our masthead. The river flows between high and well-wooded banks, winding very much, and varying in breadth from 200 to 400 yards. We brought up about dark at El-Medlia: on the 18th we passed two shallow places, and with them got over all present difficulties—the rest of the navigation being favourable during our ascent of 54 miles to Kūt-el-Amrah. In itself this place is of no importance, but its position, immediately opposite to the embouchure of the Shatt-el-Hie, gives it some consequence. The latter river crosses Mesopotamia in a diagonal direction, till it falls into the Euphrates at the small town of El-Askuh or El-Arju.

El-Medlia.

Kūt-el-Amrah.

We quitted Kūt-el-Amrah on the morning of September 21, the British and Turkish ensigns flying, intending to reach Tauk-Kezra before night. More than half the distance to Bagdad had now been accomplished with very little difficulty, but the state of the river rendered the remainder of this day's navigation very intricate; in fact, we had to proceed so cautiously, that we barely accomplished ten miles in four hours. The river presented a wide-spread surface, but was evidently so shallow, that we had very little expectation of our vessel being able to pass at all. Still, as we had observed that the large boats which navigate the Tigris river managed to pass up and down even at this season, we determined to make the attempt.

Shallow state of the river.

We made a most careful examination, not only by soundings, but also by means of our two pilots, who went into the water, and by wading and swimming, as the case might be, ascertained where a passage was practicable; and we steamed ahead, with the expectation

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of reaching deeper water before long. To our disappointment, our steamer grounded again, in what turned out to be a blind passage, and the hope of reaching Bagdad seemed to be almost at an end. The next morning, however, whilst we were employed in lightening and floating the vessel, the boats and pilots fortunately discovered a passage, which we succeeded in following under very novel circumstances.

Steamer aground.

The pilots trace out a channel.

Occasionally swimming, but more generally wading, the two pilots followed the winding channel which the water had made for itself along the bed of the river. They marked its course by means of a double row of sticks and willow-branches, and the vessel then followed, along the passage thus carefully traced out, into the opener part of the river, when she steamed onwards with comparative ease to Al-Hamarah jungle, which is 42½ miles from El-Būne. The next day we experienced some delay when passing through the islands and shallow water near Debouny, which is about midway to Um-el-Būl, or Mother of Drummers, so named from the sound caused by the reverberation of the water against the rocks. We ascended 35 miles this day, but, owing to a succession of sandy islets and shallow water, we barely made 19 miles during the 24th, to Zerviya.

Mother of Drummers.

Failure of fuel.

Our progress had also of late been a good deal retarded, in consequence of a failure in the supply of coal expected from Basrah; green wood was our only resource, and this, as a matter of course, was burnt at the expense of time. But at this halting-place a tolerable supply of wood was obtained, and our ascent was prosperously continued until we anchored, after dark,

Lieut.t J. Fitzjames, R.N. del.t

Fairland lith.

BAGHDAD.

eight miles short of Ctesiphon, having steamed rather more than 53 miles during the day.

Early on the following morning the Resident's boat arrived from Bagdad, bringing Dr. Ross, to renew the acquaintance which he had commenced with us at the moment of the Arab tumult at Hillah.

Reach Ctesiphon.

From Ctesiphon our ascent was resumed with more experienced pilots, and we felt confident of reaching Bagdad in time for supper. We had examined the crumbling ruins of Ctesiphon, and walked to see the extensive arch of Tauk-Kezra, while the steamer was navigating the great bend made by the Tigris at this place, and then continued our ascent until a shoal place brought us up opposite to the River Diyalah; and here we remained, our disappointment being, if possible, enhanced by the knowledge that we were scarcely three miles from Bagdad in a direct line. During the afternoon of August 30, we steamed the remaining nine miles by water, and Colonel Taylor came on board, and was saluted with eleven guns. As we approached the city the bridge was thrown open. Our salute was returned from the Residency; and we steamed through the bridge towards evening, into the midst of the wondering population, which covered the roofs of every house, when one individual, placing his head between his knees, was heard to call out, with great emphasis, 'Has God been pleased to make only one such creation?'

Diyalah river.

Visit of Colonel Taylor.

Arrival at Bagdad.

Our entrance into Bagdad carried me back, in recollection, to the commencement of that singular train of events, which had this day reached its culminating-point by our steamer's arrival at this city. For it was here, as far back as 1831, that Colonel Taylor and myself

Reminiscences of Bagdad.

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took the first steps for submitting to the consideration of the Home as well as the Indian authorities the information which had been obtained concerning the state of the Euphrates and Tigris. And as various circumstances, which led step by step to the organisation of the Expedition, had chiefly originated at this place, the arrival of our steamer at Bagdad was one of the most triumphant moments in the progress of the undertaking.

Retrospect.

The present low state of the Tigris rendered its navigation so tedious that we decided to give up any further ascent of the river, and to return with all speed to Kurnah. Our coal-boats, however, had not yet arrived—consequently, cutting wood for fuel was our only resource. During the delay thus occasioned, the good people of the city had free access to our vessel, of which a large number, including many veiled fair ones, freely availed themselves—keeping at the same time close to the bulwarks by way of protection.

Resolve to return to Kurnah.

Our descent was commenced on September 5, the walls and houses on each side being, if possible, more crowded with spectators than when we made our first entry into Bagdad. My old friend and our valuable pilot, Getgood, made his appearance most unexpectedly that morning, having came across from Anna on hearing where we were. He came in order to be useful to us, and brought an account of the present state of the Euphrates with reference to our approaching ascent. Our first day's run was suddenly cut short, after we had steamed 22 miles, by our running into a bank, which had been suddenly formed by one of those changes to which this river is constantly liable. After some delay

Leave Bagdad.

Getgood comes on board.

we resumed the descent, and repassed first the mouth of the Diyalah, then the ruins of Ctesiphon and Tauk-Kezra, and reached Al-Mosūl, where we brought up for the night, after having steamed 54 miles in the course of the day.

Ruins of Ctesiphon and Tauk-Kezra.

Sixty miles on the following day brought us again to the difficult passage a little above Kūt, where we anchored, that we might have time to examine the course of the river, and ascertain its present depth of water. But the obstacles we had experienced at this spot during our ascent were much lessened by our lines of marking-rods, which we unexpectedly found still remaining where our pilots had placed them, thus tracing out the channel of the river for us without any further trouble. The passage itself also was rather deeper and wider than it had been when we had previously passed through it, so that we reached Kūt-el-Amrah with very little difficulty, having previously made 20 miles. Not finding the supply of coal which was to have met us at this place,* we were scarcely able to get up any steam with the green sappy wood, which was all that we could procure the next morning; and we had the additional vexation and delay of running on a bank at Al-Maudatēn, which is 46 miles below Kūt-al-Maklia.

The difficult channel repassed.

Kūt-el-Amrah.

Kūt-al-Maklia.

It required two days of energetic exertion to get our vessel afloat again, and two more to reach Kurnah. This town is about 232 miles from Kūt, and 431 miles from Bagdad. The latter distance only occupied 55 hours under steam, but, owing to the serious delay

Arrive at Kurnah.

* We afterwards learnt that our coal-boats had been stopped on their way up the Tigris, in consequence of some misunderstanding with the Arabs.

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caused by the failure of coals, as well as by running aground several times, the voyage occupied rather more than 11 days. We found the 'Hugh Lindsay' waiting for us with the Indian mails, but, on the other hand, we learnt, with some surprise and no little uneasiness, that our ordinary supplies of meat, bread, &c. had been withheld by the people of the town, who had been in such a state of alarm and excitement, with regard to our ascent of the Euphrates, that they had appealed for protection to the Sheikh of the Montefēk Arabs, who had given orders, in consequence, not only to attack the larger steamer, but also to burn our vessel if she attempted to ascend the river. We likewise found that it was by his orders that our coal-boats had been detained.

Time occupied in the descent.

Unexpected hostility on the part of the Arabs.

What was to be done.

How best to meet this unlooked-for change in our prospects required consideration. To attempt to ascend the river amidst anything like determined hostility on the part of the Arabs would have been rash in the extreme; but if the present ill-feeling arose only from some temporary misunderstanding, it became our duty to try to clear it up, and re-establish friendly relations, while my knowledge of the Arab character led me to believe that we should accomplish this much more effectually by pursuing a decided rather than a timid course.

Letter to the Sheikh of the Montefēk.

Our first step was to procure a pilot, coals, and all our necessary supplies from Basrah. The next was to send a letter, to inform the Sheikh of the Montefēk that we intended decidedly to ascend the river, if possible on a friendly footing with him and his people, but quite prepared to resist and signally punish any-

thing like hostility on their part. This document was sent by a special messenger, with all due form, and the steps thus taken were made known to the officers of the Expedition, coupled with the information that we were at once to proceed up the river with the mails just received from India.

Prepare to ascend the Euphrates with the Indian mails.

The 'Hugh Lindsay' commenced her return-voyage on October 18, leaving two passengers, Messrs. Stewart and Alexander (the latter an invalid), to accompany us up the Euphrates on their way to England.

CHAPTER XVIII.

ASCENT OF THE RIVER EUPHRATES TO THE LAMLUM MARSHES—DESCENT TO BASRAH—THE COMMANDER PROCEEDS TO INDIA TO MAKE ARRANGEMENTS TO CONTINUE THE EXPEDITION, LEAVING MAJOR ESTCOURT IN COMMAND.

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DURING the short delay which occurred previous to the arrival of our pilot from Basrah, some light was thrown upon the hostile proceedings of the Sheikh of the Montefēk, which were, it seems, caused by the belief that we were not only about to seize and fortify Kurnah, but that we also meditated an attempt to induce the Arabs to become Christians. They were, no doubt, in some degree justified in the latter belief, by the tradition of the country that they were all, both Turks and Christians, to be subdued and forced to conform to the religion of an European Power. The discovery of the slight foundation on which their enmity rested made me look forward hopefully to the re-establishment of our previous friendly understanding with the Arabs; and with this object in view, I determined to take such a course as must show them that I placed perfect confidence in their good faith.

Causes of Arab hostility.

We commenced our ascent of the Euphrates early on the morning of October 20. The river, although lessened both in depth and width, was still imposing, and the

The ascent commenced.

foliage which fringed its banks was most luxuriant the whole way to Sheikh-el-Shuyukh. We steamed 68½ miles during this day against the current, and in the midst of a scene of the greatest life and animation. The river was crowded with large 'bagalás' (or barges), which at this season of the year are employed in collecting dates, and innumerable canoes were skimming along the surface of the water in all directions.

Canoes of the Euphrates.

The latter are chiefly framed of reeds, and are low and long, like the Esquimaux canoe, with the exception that those of the Euphrates are coated with bitumen, instead of being covered by skins. The stem and stern of these canoes are alike, so that they move either way with equal facility, and are propelled by one man sitting in the stern, or (in the case of boats of a larger size) by a man at each extremity. A light awning of striped cotton covers this boat, which is paddled with a degree of speed scarcely inferior to that of the swiftest Esquimaux canoe. They are understood, however, to be of Persian origin, rather than to be in any way connected with the Polar seas.

Enormous carp.

During this day's ascent we met with a great natural curiosity. A carp of enormous size had been left on the river's bank by the receding water, of which Mr. Charlewood gives the following description in his journal:—'Yesterday we passed an enormous fish lying high and dry on the bank. It was at least 4 feet thick at the shoulders, and 15 feet long,—in fact, much longer than any shark I had ever seen, being more like a young whale than anything else.'

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This monster was not, however, quite new to me. I had already seen two other specimens of the carp, which Pliny has described as attaining this great size; and the people of Aleppo speak of this fish as being a load for two camels. The waters of the Euphrates, however, abound in fish of many kinds in addition to the carp.

Nothing unpleasant occurred in any way up to our arrival at the densely thick and dark mass of trees which surround the Arab capital of Sheikh-el-Shuyukh, where the houses, or (more properly speaking) the huts, begin.

Animosity of the Arabs.

But here the people evinced their animosity against us, by pelting the vessel with sticks and pieces of hard mud. The women also showed their anger by exposing their persons in a very indecent manner, but we passed onwards without taking any notice of these hostile demonstrations, and a friendly reception awaited us on our anchoring within the town.

On the following morning the cause of the Arab hostility was fully ascertained. Seyd Ali, who had just rejoined us from Bagdad, whither he had been sent for some nuts and screws for the engine, explained that he had found the Arabs in such a state of uproar, that he had been obliged to travel by night to avoid danger, as the most determined hostility existed towards our steamer and the 'Hugh Lindsay.' This excitement had arisen in consequence of the injudicious distribution of some religious tracts among the Arabs, which had been brought by Mr. Samuel, a German missionary, and one of the passengers by the 'Hugh Lindsay.' Some of these papers had fallen into the hands of the Sheikh of the Montefĕk, and he, as well as the people at large,

Indiscreet missionary zeal.

became much incensed at the attempt thus made to convert them to Christianity.

Having thus come at the real cause of our unpleasant position, it seemed all-important to take some steps to restore the good understanding which had previously existed with this powerful Sheikh; but how to bring this about was an anxious question, since the safety of the Expedition might depend on the successful issue of our measures. Resolved to do our utmost to restore peace, we left the people of Sheikh-el-Shuyukh behind us, and an hour and a half's steaming against the current brought us alongside the Sheikh's spacious reception-tent at Kūt-el-Amrah.

Major Estcourt our ambassador.

Our prospects were not at first very promising, for Major Estcourt's official visit was met by the not unusual excuse, that the Sheikh was in his harēm, and could not be disturbed. This led to an immediate remonstrance on our part, founded upon the detention of our coal-boats on the Tigris, and other grievances of which we had latterly had cause to complain; while we made it perfectly clear, at the same time, that no step hostile to Islamism had been at any time taken by anyone belonging to our party. This statement was repeated to the Sheikh through an officer of rank belonging to the Pacha of Bagdad, who was on a mission to Kūt-el-Amrah; and the chief of the Montefēk at once sent his aged and confidential Vizir on board our steamer, to express his entire satisfaction with our explanation, and to request the honour of a visit from us. To this I readily consented, and a salute of seven guns was fired as I approached the Sheikh's quarters.

Explanation to the Sheikh.

His Vizir comes on board.

I found his immense circular tent occupied by some

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My visit to the Sheikh.

four hundred of the tribe, but their chief himself was not present; and the moment I became aware of this breach of courtesy, I retired, expressing my indignation most strongly as I did so. This decided conduct drew forth an immediate and ample apology, and it was arranged that one of the most influential men of the Montefĕk tribe, and a pilot from among this people also, should accompany us up the river, to punish the people of El-Khudhr, as well as to give us a tangible proof of their goodwill. These negotiations occupied the whole day, but early on the following morning, we

Leave Kūt.

resumed our course, with the pilot and the Sheikh's representative on board. The river was winding, and did not anywhere exceed from 2 to 5 fathoms in depth.

Two hours beyond Kūt we stopped at El-Arjah Gumesh, beyond which place we made our way through occasional marshes, and found the river literally alive with canoes. About midday we reached a shallow spot in the river's course, and towards evening, when it had become almost dark, we came to anchor about eight miles short of El-Khudhr, whither we proceeded early

Return to El-Khudhr.

next morning. We passed the wood, and anchored at the open space beyond the trees, when we discovered that all the women, children, and cattle had been sent away, their canoes sunk, and the Arabs themselves occupied the wood in force, armed with matchlocks. They had stationed themselves also in the two castles near El-Khudhr, as if they apprehended an attack.

We soon made it clear to them that it was not our intention to take the law into our own hands, but that we proposed to leave the settlement of our grievances to the great Sheikh and his delegates. This was no

sooner understood than the women and cattle were brought back to their houses, and, trusting to the Sheikh so to deal with these people as to secure future travellers from similar wanton hostility, we left El-Khudhr.

Leave El-Khudhr.

Our navigation went on most satisfactorily until late in the afternoon, when we grounded in the shallow water near Karagūn inlet, where our real difficulties were about to commence.

We had discovered that the steamer failed to answer her helm in shallow water, and that it would be necessary, in consequence, to employ trackers, to guide her at the sharp turnings of the Lamlum marshes, which we were now on the point of entering. Seyd Ali had already gone to Semavah, to procure such assistance as these circumstances had rendered requisite, more especially for the part of the river near Berga. Accordingly, 80 Arabs appeared just as we were approaching the expected difficulty, and with the promise of liberal remuneration they commenced their task with apparently hearty goodwill—one half towing on one side of the river, and the remainder on the other.

Towed through the Lamlum marshes.

We were quite in spirits at this good beginning, and at the prospect of being soon through the marshes, and in the more open part of the river. But we discovered that to help us on was in reality no part of the intention of these men, and that, instead of being useful, their delight consisted in thwarting us as much as possible. They were, indeed, on the point of doing this most effectually, since they made an attempt to overturn our vessel, and had, in fact, all but accomplished their mischievous design, when it was happily frustrated by

Malicious designs of the Arabs.

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one of the hawsers parting in the middle at the most opportune moment. Of course, on discovering their treachery, they were at once discharged from our service. They did not, however, return to Semavah, but remained on the river's bank, watching, with sullen disappointment, our efforts to get through the marshes into the open water, by means of anchors, pulleys, and hawsers. While we were thus laboriously working our way onwards, our endeavours were suddenly and effectually brought to a close by the discovery that our larboard engine could no longer perform its work. What were we to do now?

Difficulty of navigating the marshes.

Engine disabled.

We were all aware that the size of our vessel, her draught of water, and her failure in steering (especially in shallow places), must cause serious difficulties in getting through the marshes; but these once passed, we had anticipated no further obstacle to our successful ascent, and our disappointment was proportionally great on finding that it must be relinquished for the present.

My attention was at once turned to the question of forwarding the mails, and Mr. Fitzjames volunteered to undertake the difficult and almost solitary journey which their conveyance necessarily entailed. He set out on October 30, accompanied by our two fellow-passengers, Messrs. Stewart and Alexander, and encouraged by hearty cheers from us all, which were kept up until they were quite out of hearing. Fitzjames and his companions accomplished their adventurous journey, but not without serious difficulty.

The mails forwarded by Mr. Fitzjames.

This duty attended to, the warps were taken on board, the paddles unshipped, and other arrangements made to enable the 'Euphrates' to commence her

Descend the river with one engine.

descent, which she did on October 31—dropping down the stream with some risk and even damage to herself, from constantly running against the banks. This was only while passing through the shallows. Once in the open part of the river, our paddles were reshipped, and we were steaming down-stream with our one effective engine.

El-Khudhr again.

We were already off El-Khudhr on November 3, and heard one or two shots fired as we passed. We did not see the balls strike the water, but, fearing that they might have been intended for us, we rounded to at once, and remained a little time close to the village; after which, observing no further hostile demonstrations, we steamed onward to Kūt, where we received fresh assurances of support from the great Sheikh, who even went so far as to express his readiness, on any future occasion, to go with us himself, in order to make sure that his dependents conducted themselves properly. Green poplar-wood, obtained with some loss of time at Sheikh-el-Shuyukh, carried us down to Basrah at reduced speed, and we brought up again alongside of the 'Hugh Lindsay' on November 8. We had the great satisfaction of finding from her engineer that he was provided with means to do all that we required, and thus we had the unexpected prospect of seeing our little vessel once more efficient without much delay.

Return to Basrah.

The next consideration was how best to employ the two-and-a-half months which remained to us up to January 31, 1837, at which period the funds voted by Parliament would cease to be available for the Expedition. This was a subject of most anxious thought to me. My original instructions, emanating from the India

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Board, were to the effect that 'on reaching Basrah, the Expedition was to be placed under the command of the Bombay Government.' * It had been considered that the arrival of our two river-steamers in the Persian Gulf would give an opportunity for some useful service not to be lost, and that when we should have descended the Euphrates, the vessels might accomplish some other important object. Accordingly, instructions were given by the Supreme Government of India with this view.

Proposed survey of Indian rivers.

But by the time these orders were received, the 'Tigris' had been carried to the bottom, and there were no longer two steamers available for the service in question—the survey of the Indian rivers. One vessel, it is true, was still effective, and a good deal might yet be done with her could she be taken to the Indus without risk; but as this, at the best, could only have given means, on a crippled scale, of carrying out an extensive survey, the Supreme Government of India might think it unadvisable to continue the survey in Mesopotamia for the present. These points, however, could only be decided by the Supreme Government in conjunction with that of Bombay, and it seemed advisable, all things considered, that I should at once proceed thither for instructions.

Decide to proceed to Bombay.

Major Estcourt left in command.

I therefore arranged that, during my absence, Major Estcourt should take the command, and that as soon

* 'Should you arrive at Basrah by descending the Euphrates, you will consider yourself to be under the command of the Bombay Government. You will immediately on your arrival repair and refit your steamboats, so as to be enabled to execute any orders you may receive.'—Part of Lord Ellenborough's letter (No. 2) to Colonel Chesney, dated January 24, 1836. Papers ordered to be printed, February 23, 1836.

Also ibid., paragraph 11: 'On your arrival at Bombay you will place yourself under the orders of the Bombay Government.'

Lt Col H.B.E. Estcourt Delt.

C.H. Fairland Lith.

ASWAN.

as our steamer should again be in an efficient state, the Karūn and Bah-a-Mishir should be carefully surveyed; and that, after accomplishing these objects, he should ascend the Tigris to Bagdad, and be prepared to break up the Expedition at that city, if such should be the decision of the Indian Government.

At the moment of my departure for India under these circumstances, the 'Euphrates' was steaming towards Mohammerah, where, after a little delay for fuel, the contemplated surveys were commenced, some account of which may be briefly given, almost in the words of the distinguished officer under whom they were carried on, accompanied by Messrs. Charlewood, Ainsworth, and Rassam.

Ascent of the Karūn.

After making an examination of the Karūn-el-Amrah, the Dorak or Zelahiyah, and the system of canals in that neighbourhood by which the River Jerahi is almost drained, the party passed on by land to Ahwaz (the ancient Aginis), where they found the steamer already at anchor below the ledges of rock which cross the Karūn. These rocks being impassable for our vessel, Major Estcourt and his party ascended in a country boat by Wais to Band-i-Kir, at which place the two branches of the Karūn unite—that called the Ab-i-Diz, and the eastern branch also, both of which flow by the city of Shuster. In descending from Ahwaz, the steamer, after making a fresh examination of the Bah-a-Mishir, proceeded by Mohammerah to Basrah, and on to Kurnah.

Major Estcourt ascends to Band-i-Kir.

A 'kūfah,' or round wicker-boat, had been already sent up the river by Major Estcourt with coals, in addition to two other coal-boats, which it was now found

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had been detained by one of the Arab sheikhs, who endeavoured to exact tribute in contravention of the arrangements which had been made with the head of the Montefēk. These boats therefore were taken in tow, and, to the astonishment of the people along the Tigris, the steamer proceeded up the river, dragging two heavy boats, apparently (as far the people could judge) with undiminished speed. By the time they reached Kūt-el-Amrah, one of the boatloads of coal had been consumed.

Christmas Day was spent between the sites of Ctesiphon and Seleucia, and the next day they reached Bagdad. Although the waters had not begun to rise, says Major Estcourt, it seemed advisable to start at once, and to await their rising in our passage upwards. On January 2, 1837, therefore, the bridge of boats being unmoored, the steamer, with several visitors on board, moved past the Pacha's palace and along the date-groves and gardens to Kaymen, and upward to Sherriat-el-Beitha, the presumed site of ancient Sittace. Next day, owing to a gale of considerable force, the sky was obscured, and the whole atmosphere loaded with dust, and it continued thus during the day's ascent of 20 miles; when owing to shallow water, and to the vessel not steering well, she ran against a bank, and in doing so the upper ring of the rudder was broken. Steering, especially in shallow water, now became out of the question, and thus an immediate return to Bagdad was necessary in order to repair the injury, and, at the same time, increase the size of the rudder so as to have a greater command over the vessel.

The steamer reaches Bagdad.

Ancient Sittace.

But by the time this alteration was completed the

Lt Col Estcourt, 45th. Idol — H. Warren lith.

Day & Haghe lith. to the Queen

period for breaking up the Expedition had arrived; and as the seamen, more especially those obtained from the cruisers in the Persian Gulf, were not subject to the restraint of martial law (which had, in the first instance, been given with some restrictions to the Expedition), they caused so much uneasiness by their conduct that it was thought advisable by Major Estcourt to send away the most troubelsome among them, and return the others to the vessels from which they had been lent to the Euphrates Service. These arrangements being made, and the steamer left in charge of Mr. Hector at Bagdad, Major Estcourt prepared to return to England with the rest of the officers and men.

Discharge of seamen.

Just as they were about to leave Bagdad on their way home, authority was received from the Government of Bombay to continue the Expedition. But as it was no longer effective in point of men, Major Estcourt at once decided to carry out the orders previously received from the Home Government. Accordingly, on January 24, the party started on camels to cross the desert to Damascus, where they arrived on February 14, after having been more than once seriously menaced by the Bedawin.

Major Estcourt's party cross the desert.

One of these threatened attacks occurred near El-Kaim, where the approach of a body of horsemen, evidently hostile, menaced the little party with serious danger, which Major Estcourt immediately encountered by placing his men in a circle, so as to be ready to meet an attack on any side. Upon this a flag was displayed by the Arabs on a spear-head on the crest of a hill in the rear, on which signal another party came galloping towards them from that direction, whilst many

Attacks in the desert.

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more collected from the other hills around; but their advance was checked by a few shots from some of the cameleers. They were now, however, in considerable numbers, and enclosed Major Estcourt's little party within a circle at a distance of about 100 yards; but, seeing that everything was ready for their reception, the Arabs contented themselves with continuing their warlike demonstrations for a time without doing more.

With the exception of the appearance, near Palmyra, of about a dozen mounted Arabs, who rode away on finding there was no opening for an attack, no other incidents of this sort disturbed the even tenor of the little party's desert journey, through Palmyra and Damascus to Beïrūt, and thence by the mail-steamer to England. A gratuity was given, by order of the Government, to the remaining seamen and soldiers, as an acknowledgment of their very exemplary and meritorious services; and the artillerymen, as well as the sappers and miners, were returned to their own corps with that marked approbation which their conduct and exertions had so well deserved.

Arrival of Major Estcourt and party in England.

CHAPTER XIX.

REACH BOMBAY—REFERENCE TO THE GOVERNOR-GENERAL—DÂK JOURNEY TO THE INTERIOR OF INDIA—RETURN TO BOMBAY.

It was from the deck of the 'Hugh Lindsay' that I took my last look at our vessel, then preparing to leave Mohammerah, to complete the service, of which I have given an account in the preceding chapter.

Take leave of the 'Euphrates' steamer.

The 'Euphrates' steamer had been to me an object of the deepest interest for the last two years; and it was with mingled feelings of thankfulness for the past, and of anxiety as to the future success of this our initiation of the great Euphrates Route to India, that I took what proved to be my *farewell* look at the vessel as we descended the Shatt-el-Arab.

The 'Hugh Lindsay' reached Bushire on November 17, took in a supply of coal at Bassadore, and another at Muscat, and reached Bombay on December 1.

Arrive at Bombay.

I was received with the greatest kindness by the Governor of Bombay, Sir Robert Grant, and his Lady, at their summer residence, Parell; and I had the still higher gratification of finding that, both there and elsewhere, the strongest interest existed in the grand question of an overland steam-communication between England and India *viâ* the Euphrates. But how to promote and assist this object was the great consideration with

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us all, more especially as to how far the present Expedition might be made available for this purpose.

Reference to the Governor-General of India.

I ventured to propose to the Governor in Council to open the Red Sea and Euphrates Lines for alternate monthly communications to England, experimentally, for twelve months. This however, it was decided, was a question for the decision of the Supreme Government of India. Consequently, my arrival was at once reported to the Governor-General, while I expressed my readiness to proceed to Calcutta, as the best means of entering fully into the steam-question. The points to be decided were—1st, whether the present Expedition should be continued; 2ndly, whether, if it were to be broken up on January 31 (as previously contemplated), the remaining steamer should be taken to the Indus, in accordance with our original instructions, or not.

Interest at Bombay in the overland communication with England.

During the time which must necessarily be allowed for the arrival of an answer to my letter to the Governor-General, all those concerned in the question, especially the mercantile community of Bombay, were keenly alive to the necessity of organising the overland line of communication with England at once, and it was even proposed to raise money for this purpose on the spot.

Want of knowledge of steam-power.

But steam-navigation for lengthened or distant voyages was still in its infancy, and although some persons considered that a large and powerful steamer might reach the Persian Gulf during the south-west monsoon, a passage to the Red Sea during that season was almost universally regarded as quite impracticable. The public mind being impressed with these objections, it is not surprising that doubts and

possible difficulties should have stood in the way of the practical development of this great question *at that time*.

That there should be any hesitation as to its immediate adoption now—when science has triumphed over all the natural obstacles which seemed so formidable thirty or forty years ago—must be a matter of surprise and of deep regret to all thoughtful and practical men, who see and acknowledge in the carrying out of this short and direct line of communication along the Euphrates, not only untold commercial advantages to England, but safety and happiness to India.

Whatever disappointment there might have been, however, with regard to the knowledge and appreciation of the powers of steam, there was none in other respects. The most gratifying feeling was manifested towards the Euphrates Expedition throughout the peninsula of India. The Chamber of Commerce of Bombay voted a gold-mounted sword to the Commander, and expressed their determination to open a subscription for the benefit of the relatives of the brave men who had perished in the 'Tigris.' This idea was warmly taken up throughout India, and 500*l.* eventually passed through my hands, and was distributed among the relations of the deceased men.

Sword presented and subscription raised at Bombay

While waiting for a reply from the Governor-General about the future services of the Euphrates Expedition, the carefully-kept archives of Bombay gave me the opportunity of becoming acquainted with the practical working of the postal line through Arabia.

This line was organised and carried out under the direction and special superintendence of that most

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distinguished Governor-General, the Marquis Wellesley. Fast vessels of small size were employed in making fortnightly voyages between Basrah and Bombay, and Arab couriers, mounted on dromedaries, kept up a regular communication with Aleppo, from whence Tartars—called 'life-and-death Tartars'—carried the despatches to and from Constantinople. The sea-voyage usually occupied from ten to fifteen days between Basrah and Bombay, and these voyages were equally continued during the SW. monsoon.

Lord Wellesley's postal line through Arabia.

It was on this postal line through Arabia that England depended, during the great French war, for early intelligence of the progress of the contest with Tippoo Saib, as well as of other momentous campaigns, on the result of which the preservation of our Indian Empire constantly depended. The earliest intelligence was then—as, indeed, it has been more recently also—of vital importance to the nation, and the utmost exertions were made to secure it. Towards the close of the last century it was well known, to those more immediately interested in the question, that an overland communication had been kept up with India through Arabia. But without a careful examination of the archives existing at Bombay, it would scarcely be possible fully and adequately to appreciate the care with which Lord Wellesley maintained a fortnightly postal line between England and India. The Arabian portion of this line was kept up for many years by the East India Company's Resident at Basrah, then Sir Harford Jones Brydges.

Its vital importance to England at the time.

Sir Harford Jones Brydges.

A reference on my part to what had been accomplished at that period caused the Bombay Government

to give directions that the 'dromedary dâk' should be reopened, under the immediate charge of Mr. Hector. This was done (as compared with Lord Wellesley's time) with the great advantage of steamers instead of sailing-vessels. Whilst, however, these preparatory steps were in progress, the more immediate measure was taken by the Indian Government of forwarding directions to Major Estcourt (December 21), to continue the service on which he was engaged, instead of terminating the Expedition on January 31, 1837, in accordance with the instructions of the Home Government. In any case, however, this would only have given one line of communication, whilst the necessities of India required at least a second, and it was deemed advisable that I should proceed to Calcutta to lay the whole question before the Governor-General. It was now the end of February; travelling in India was a very different thing in 1836 from what it is now; and the capital could only be reached by sea, or by a tedious journey of relays of dâks. I decided on the latter alternative, taking the route of Agra and Delhi in order to see something more of India. The caves of Ellora, the battle-ground of Assaye, and the wonderful caves of Ajunta, were all visited in turn, but I pass over the incidents of this journey as irrelevant to my present narrative.

Mr. Hector left in charge of postal lines.

Directions to Major Estcourt to continue the Euphrates Service.

Journey from Bombay to Mhow.

On reaching Mhow, my progress was unexpectedly stopped by the intelligence that the Governor-General, Lord Auckland, thought it advisable to postpone the opening of the Overland Route, and that he was not prepared to carry out his *previous* intention of placing steamers on the River Indus. There was, therefore, no longer any object in going to Calcutta; on the

Lord Auckland's change of plans.

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contrary, it seemed best to return to Bombay as rapidly as possible, in order to complete the arrangements now in progress, and then to rejoin the Expedition at Bagdad. My line of route was through Oodeypore—a place never to be forgotten from its singular beauty—and onwards through Ahmedabad to the Gulf of Cambay, whence the Government schooner 'Tapti' carried me to Bombay on April 18. The 'Hugh Lindsay' had not appeared in the roadstead, and I was already anticipating the pleasure of rejoining the party on board our little vessel at Bagdad, when I received a letter from Major Estcourt, informing me that the directions to continue the Euphrates Service had reached him too late, and that he was by that time some distance on the way to England, after having returned the borrowed seamen to their ships.

Return to Bombay.

Expedition broken up.

This was a most serious disappointment to me, because I had expected that the Euphrates Service would have been kept open, until such a class of steamers could have been put on the line as would have been suited to do the work more effectually. It was now, however, impossible for me to return to England with the officers and men of the Expedition, and nothing remained but to take the speediest route for home in order to close our labours.

It was decided that my line should be the direct one through Arabia, instead of that by Bagdad. The 'Hugh Lindsay,' just returned from service at Mangalore, sailed on April 28, for the Persian Gulf, carrying the despatches relating to the insurrection at the former place. As these were of great importance, I felt it to be my duty to offer to take charge of them; and they

Leave Bombay, to carry despatches across the desert.

Lt. Col. Escourt, 43rd L. I. del. G. Hawkins, Junr. lith.

Day & Haghe Lithrs. to the Queen.

BASRA CREEK.

were accordingly placed in my hands, with the understanding that I was to carry them, with all practicable speed, from sea to sea across the desert. On May 6 we reached Muscat, on the 9th we passed Bassadore, and on the evening of the 14th, we were alongside the Company's cruiser 'Tigris' at Basrah Creek. An overland mail, which had just arrived, brought us the cheering intelligence that two steamers were about to be sent out, under the command of Lieutenant Lynch, to open a mail-communication by the way of the Euphrates.

Preparations for desert journey.

The next morning saw me preparing for my rapid homeward journey, accompanied as far as Zobeir by Lieutenant Charles Campbell, who had rendered me the very material assistance of laying down the compass-bearings to Damascus—viz., NW. by W ½ W.—to aid me in directing my course by day, and had also ascertained that the stars Castor and Pollux would be above the horizon, to serve as my unfailing guides by night. I engaged two Arabs and four 'delūls,' or light camels, for crossing the desert. These animals are far preferable to the dromedary (the 'ragin' or 'mahary') and also to the 'khowas' or heavier camel of burthen, which, though a much more powerful, is also a slower beast, and would in this case have consumed too much time.

The delūls and other camels.

The 'delūls' carry a light burthen, combined with capabilities of considerable speed. The preparations of my Arabs consisted of some rice, a bag of dates, flour to make bread, and a supply of water; and my own were almost equally simple, being limited to rice, biscuits, tea, and coffee, with brandy for occasional use, especially to make the water more drinkable. My personal equipments were an Arab dress, and a kind of canopy, which

Equipments and provisions.

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was spread on four light poles, to give protection from the sun when halting; when in motion, I held a cloak above my head, by means of a stout walkingstick, as a more efficacious protection from the sun than the Arab 'keffeyeh' alone. Such were the preparations for my long and solitary journey through the desert.

CHAPTER XX.

JOURNEY ACROSS THE ARABIAN DESERT—RETURN TO ENGLAND, AND TERMINATION OF THE EUPHRATES EXPEDITION.

EARLY on the morning of May 15 we took our departure from Zobeir—myself, my two attendant Arabs, two camels, and two horses, which latter were to be exchanged for two 'delūls' at the end of our first short day's journey. Near Zobeir we crossed what are, no doubt, the remains of the great Canal of Pallacopas; and soon afterwards we came upon one of those living pictures of the desert, which would well repay an artist for many a monotonous day's travelling. The considerable tribe of the Ibn-Souad was migrating eastward from the vicinity of Tadmor: the women and children mounted on camels—the men in their picturesque attire, with their horses, cattle, and arms,—presented a most effective picture amidst the stillness of all nature in the desert.

Leave Zobeir.

The Pallacopas Canal.

Migration of Arab tribes.

I do not propose to detain the reader by the daily details of my almost solitary ride of twenty-two days across the Arabian Desert. But, as this journey was unique in its way, some account of our progress, and of such incidents as are characteristic of desert travelling in Arabia, will not be wanting in interest.

Our first halt towards sunset was at the tents of the Chabdi Arabs, a branch of the Montefēk, where I heard

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my own Arab attendant telling, as a piece of news, that I was Hawajji Yusuf from Bombay—a story which must have originated in my arrival by the 'Hugh Lindsay': at all events, I continued to bear this appellation during the whole journey.

A day's journey in the desert.

We resumed our journey at 2 A.M., which was indeed our usual hour for starting for our *day's* journey of 19 hours. The Arabs pointed out Sheikh-el-Shuyukh at about six miles to the NE. We travelled all day over a sandy plain, with scanty grass and camel-thorn, to the well Esarhi, meeting the Rassier Arabs, who were also on the move. They were a large tribe. Their women were all mounted on camels, and each was shaded from the sun by a kind of canopy stretched over her head. Onwards we rode over the same sandy plain, halting at one time for Moslem prayers, and at another for our longer rest at the tents and wells of Hawadia, which are called four days' journey from Basrah. We had made 50 miles during the day. Here the Arabs baked their bread and then fell asleep—their heads, as usual, quite buried in their 'abbas'—while I sought repose under my flying tent, after a traveller's meal.

Sliding scale of backshish.

With a view to induce my Arabs to accomplish the longest possible distance each day, I devised a scale of 'backshish,' which was to increase or diminish according to the number of days consumed in reaching Damascus. With the help of this device, we managed to do as much each day as our camels could accomplish, usually starting at midnight, or soon afterwards, and seldom stopping until sunset for food and a short season of repose—our scanty meals being otherwise easily taken as we travelled on.

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The character of the desert during our third day's journey was arid and stony, with the exception of one beautiful refreshing little oasis, bright with trees and herbs, which tempted us to halt for breakfast. We passed through several 'wadis'—those of El-Eshcol, El-Hauran, and many more—which are rocky and occasionally enclosed by hills; and before midday we halted for half an hour in the bed of a river, where my rice was cooked and eaten under the shade of my cloak spread over a bush, the thermometer being at 104°. Beyond this resting-place we crossed a stony plain, on which were several low circles of stones (evidently artificial), each about 20 feet in diameter. The Kirja mountain lay a little to the N. by E. This day we calculated that we had made 61 miles in 18 hours. We saw gazelles and hares occasionally during our succeeding day's journey over stony ground, with the thermometer at 109° under the canvas, and 135° outside.

Oasis in the desert.

Heat of the desert.

Our midday halt was at the entrance of the Wadi Meredji. Here our rice could not be cooked nor tea made for want of water, and our slender meal consisted of biscuits, and the Arab preparation (made from flour) called 'muggle,' which is rather an agreeable acid drink, though I felt the want of my usual refreshing tea. I managed to protect my head in some degree from the fierce heat of the sun, by a towel folded inside the fez, and by holding a part of my cloak aloft by means of a stick. We were still traversing a hard surface of clayey soil, with scanty bushes. Hares and gazelles were the only living creatures we met while we traversed the wastes of El-Kaim and El-Birs, and passed the well of Bahr-el-Meshed. At one time during this day, the

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Euphrates appeared reflected above the horizon in a very remarkable manner, when we must have been at least 24 miles distant from it.

Reflection of the great river.

The evenings were always deliciously refreshing, the thermometer falling to 77°. The Arabs generally made the temperature still more enjoyable to themselves by dispensing almost entirely with their usual clothing. We generally halted for four hours, resting and feeding our animals alternately during that time, and then resuming our journey. We endeavoured to avoid the Bedawin encampments as much as possible, but coming upon one of them, near the foot of Tel-el-Bin—which bore a strong resemblance to Balkis Hill, near Bir—we were hospitably received by the Slaib, a section of these gipsy Bedawin. They were encamped on one side of the sandy plain at the foot of the Jebel-Kara range of hills. Their tents are of a peculiar construction, well-suited to the habits of these wandering hunters of the desert, being exceedingly light, and easily removed from place to place. They were eight feet long, and barely three feet high at the ridge, from which the sides, made of double camel's-hair cloth to resist the sun, slope downwards to the surface of the ground. A gazelle was cooked for us immediately, but they paid themselves rather unworthily for their hospitality and trouble by secreting my only travelling-rug.

Bedawin Arabs.

Their tents.

We had now passed a week in the desert, and were making satisfactory progress. On May 24 the reflection of the great river suddenly appeared for the second time most distinctly: so powerful was the refraction, that the wide-spread stream seemed to be

Refraction again.

close at hand, and I could not have believed it to be an illusion, had I not known that we were then at a distance of at least 30 miles from the nearest point to the Euphrates at El-Kaim.

We came upon a supply of water about this time, when it occurred to me that the great power of the sun would be sufficient to enable me to make my tea, and dispense with our usual fire. I therefore exposed two bottles of water to its rays—with the thermometer at 105°,—and I found that I could make, by this means, as good tea as that drunk by the Chinese coolies. I frequently made tea afterwards in this primitive manner, and found my discovery invaluable on many occasions during this desert journey.

Tea made by the heat of the sun.

On and on we journeyed, over the same hard pebbly surface—occasionally varied by a rounded distant hill, slight undulations, and a few stunted shrubs—till we reached another encampment of the Slaib Arabs, where we were well received. All the women wore large rings in the right cartilage of the nose; and they were round-faced and decidedly pretty brunettes, for Arab women, who are not remarkable for beauty. But many of the children and men were afflicted and disfigured with weak eyes. A salted gazelle was produced as a treat for us, but the excessive suffocating heat in their low crowded tent made any eating out of the question, beyond my usual fare of a little rice.

Slaib camp.

Arab women.

From 50 to 60 miles was our average day's journey: sometimes we had to diverge from our direct line, to avoid the Aniza or some other dreaded Arab tribe. We had by May 25 accomplished quite half our distance, and our four 'ships of the desert' were still

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as effective as at the start, notwithstanding their short rests and limited feeding-time. The powers of endurance of these animals excited my wonder and admiration. We now came upon a less arid part of the desert, and our poor animals found both grass and more abundant camel-thorn, while we had the enjoyment of the sweet notes of the nightingale issuing from little bushes of the liquorice plant. We were just entering the rocky bed of a river with the hope of water, when the cry of 'Arabs!' caused us to retreat hastily, and turn off in a northerly direction; but, happily, in the afternoon we came upon a well, where we were consoled for our morning's disappointment by a supply of refreshing water.

A camel's powers of endurance.

Nightingales in the desert.

A well of water.

We passed also a tepid saline stream, similar to and no doubt connected with the more considerable one near Hit. We were now halting in a grand and rocky valley, resembling in scenery that of Wadi Helfa. On May 26 we reached Wadi Hauran, and here my Arabs began to express reluctance to proceed any farther, and all the encouragement I could give was needed to induce them to go on. We had again got over 51 miles in eighteen hours, with the thermometer still at 115° outside, and 108° under my little awning. We saw a fox this afternoon, which gave hopes of more water; but we were disappointed, and for once the Arabs missed their way, and took up their quarters for the night close to an ant's nest, which proving a decidedly uncomfortable resting-place, we removed our quarters at once. Daylight showed us that we were only a short distance from our intended place of encampment. On resuming our journey we came to some moist ground. The moment the Arabs

Unwillingness of my Arabs to proceed.

perceived this they sprang from their camels, and with their hands and two small drinking-cups began scraping up every drop of water, first for their animals, and then by the same process obtaining a little muddy liquid for themselves.

Plain of Tadmor.

Passing through a valley scarcely a mile wide, we entered upon the wide Plain of Tadmor, occasionally meeting low hills clothed with scanty grass. We stopped to rest about noon; but as this was our second halt within a few hours, some remonstrances passed between me and the Arabs in consequence, which led to high words between us. Reflecting, however, that this was an awkward state of things, especially in the Arabian desert, I made an overture of peace by asking for water, which the younger of my companions hastened to bring me, with evident pleasure: it was both given and received as a token of peace; while I expended my whole stock of Arabic in assurances to my two followers, that but little time now remained in which to accomplish the remainder of our journey. They appeared to understand, and from that time forth continued faithfully to do their best.

Quarrel with my Arabs.

Reconciliation.

A camel falls lame.

On May 28, an earlier halt than usual became necessary, in consequence of one of the camels falling lame. This seemed to me to be a very serious misfortune at first; but the Arabs immediately sewed a piece of thick leather over the blistered part of the creature's foot, and it was again as ready for work as ever. During the 29th, we re-entered the Plain of Palmyra, and passed the ruined village of Antar. We were then about parallel to Anna, and saw some hills of moderate height to the SW., one of which (Mount Crooge) appeared to be of volcanic rock. Our landmarks were now

Plain of Palmyra.

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becoming more frequent and more varied. On May 30, we had the pleasurable sight of the three castles of Romania, occupying the crests of a bold range of hills on the western side of the valley of this name, having a parallel but lower range on its eastern side; so that there could no longer be any doubt that we had fairly entered the plain and valley of Tadmor. This valley became narrower as we proceeded towards its upper extremity, where we climbed the pass leading into the Wadi El-Hairy, which is bounded by the Ain-Anadja hills on the right, and gradually widened into a plain as we descended it, until, under the name of Wadi El-Gerem, it brought us to our resting-place a little before midnight. Darkness prevented me from making out the character of the country, but I thought that by pushing on, after a short rest, we might still be able to accomplish our journey within the appointed time. The camels, however, were quite unable to add to the 48 miles they had already made; and I therefore prepared to leave them and proceed on foot, so as to be able either to send or take the despatches in time for the mail.

Valley of Tadmor.

Wadi El-Gerem.

Prepare to proceed alone on foot.

Foreseeing the possible contingency of the camels breaking down, I had on leaving the steamer provided myself with sufficient food, in a very compact form, to last at least two days. But, when actually starting, my two faithful followers grasped my cloak, and with tears in their eyes, implored me to remain until the morning; to which I reluctantly, but fortunately for myself, consented—since I was not, as they were, aware that we were still at some distance from Palmyra.

On we went, getting over 54 miles on May 31, during

which day I expected every hour to come within sight of the ruins: at one moment the barking of dogs, at another the cry of 'Tadmor!—Tadmor!—Tadmor!' excited my hopes to the highest degree. On, on still, during the whole of June 1. The double-topped mountain of Jebel Antar, and later in the day the bold outline of the Tadmor mountains, came in sight, but not Palmyra; and we were forced to halt at 10 P.M., after a journey of 57 miles, but so near to our desired goal that we could hear the barking of the dogs, and knew that we were almost on the borders of the Salt Lake. We were off by four o'clock in the morning, and crossing the salt-incrusted plain, we kept in a parallel line to the lake, until daylight showed us first the mountains behind Palmyra, with the town of Racca on one part of their summit, and a castellated building on another.

Salt Lake behind Palmyra.

Diverging from the Salt Lake, Palmyra itself opened upon us, and we had a glorious view of these extensive ruins. The two castles, the Temple of the Sun, and the Grand Colonnade, were distinctly visible; but not allowing myself more than a passing glance at them, I hastened onwards, hoping to find speedier means of completing the journey than our tired camels could afford. I was, however, doomed to disappointment. Neither animals nor messengers were to be found. There was nothing for it but to prosecute the journey towards Damascus with our poor and already overworked animals, with the reservation on my part that, if they absolutely broke down, I could still proceed on foot. My good Arabs no longer made any objection to continue the journey, after a few hours' rest to recruit the poor camels, and this interval was spent by me in

Reach Palmyra.

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exploring the beautiful remains of the city of Zenobia. At four o'clock the next morning we were again on our way.

For the next four days we travelled on as fast as the state of our wearied animals would permit. We passed the considerable town of Kariateen, and the villages of Nasaim and Jerūd, and halted at an Arab camp on the evening of June 4, where I learnt that Seyd Ali had passed on with the mails only two days before me. A messenger was here available, and therefore I sent him on to Damascus, to inform Mr. Farren that I was at hand with the despatches, that he might be prepared to forward them at once on my arrival. Following my messenger during the night, we were within sight of Damascus by daybreak, and were cheered by the enlivening sight, to us desert travellers, of groups of people either entering or leaving the city, and of the encampment of the caravan of Persian pilgrims on their way to Mecca—some with green tents, others with the ordinary dark tents of the country. The former we found belonged to some royal dames of the household of the late Prince Royal, Abbas Mirza, who were on their way to the Shrine of the Prophet.

Kariateen.

Damascus in sight.

Caravan of pilgrims.

The rising sun imparted some of his brilliancy to the dome and minarehs of the city, and a share of his cheering influence to our hearts, and apparently to our wearied animals also ; for their renewed exertions as we approached Damascus seemed to tell us that they too knew that their journey of 958 miles was nearly over.

As we entered the city I learnt that our Consul-General (Mr. Farren) was in the country, and I was turning towards the house of the French Consul,

Arrival at Damascus.

Lieut. Col. Estcourt, 43rd L.I. del. — G. Hawkins, lith.

Day & Haghe Lith.rs to the Queen.

BEYROUT.

M. Baudin (from whom I had received many kindnesses in 1830 and 1831), when, on my way thither, I was so fortunate as to fall in with Signor Biaggi, from whom I had parted on the evening of the memorable day on which we commenced our descent of the Euphrates. I seized my kind friend by the arm, to his unutterable surprise; for 22 days' exposure to a burning sun had scarcely left one recognisable feature in my countenance, and I was obliged to prove to him that it was *not* a Bedawin who had accosted him so unceremoniously, before he could feel reassured. *Then*, his hearty welcome can never be forgotten, nor the pleasure of his excellent breakfast, after my scanty desert fare for three weeks. Letters, public and private, from Europe awaited me; but scarcely allowing myself time to read them, and refusing Mr. Farren's proffered hospitality, I pressed forward on horseback to Beïrūt, with the hope of catching the mail-boat for Alexandria the next night.

Meeting with Signor Biaggi.

His hearty welcome.

The gates of Beïrūt were closed before I reached that place, and I only got into the town the next morning to experience the disappointment of hearing that Seyd Ali had sailed on the previous day. To reach Alexandria in time for the next steamer was therefore all-important, and to accomplish this I hired a small vessel of the country as my only resource. We sailed the same evening (June 7), but had to contend with such baffling winds and calms that we only entered the harbour of Alexandria on the 17th. The nine days thus spent did not, however, seem long. Unintermitting exertion, and constant anxiety to accomplish my purpose, had suspended, as it were, the

Reach Beïrūt too late for the mail.

Sail from Beïrūt.

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prostrating effects of twenty-two days' travelling on a camel, for nineteen hours out of every twenty-four. But *now* Nature had her turn, and, with the exception of short waking intervals to take food, I slept uninterruptedly from Beïrūt, until we entered the harbour of Alexandria, where the quarantine boat came off with the news that Seyd Ali had only arrived there the previous day, and that I was quite in time for the French steamer.

Reach Alexandria in time for the mail.

As there was no other immediate opportunity of reaching England, I determined to go on by her, although this involved the delay of going round by Syra. Taking with me the general mails brought by Seyd Ali, we sailed on June 18. We made Syra on the 21st, Malta on the 28th, and Leghorn on July 4, where we perceived that the numerous vessels lying abreast of the town had their colours half-mast high. We knew at once that this betokened some unusual event, and we learnt only too soon, from the quarantine boat, that William IV was no more.

Proceed to England.

Death of William IV.

Thirty busy years have elapsed since the death of our late revered Sovereign, the spontaneously warm friend and supporter of the Euphrates Expedition, but the feeling which followed this melancholy intelligence is almost as fresh as ever.

We reached Marseilles on July 5, and were carefully locked up, as usual, in the Lazaretto. The despatches I had carried, and the rest of the mail, after being fumigated under my eyes, were sent forward by the evening's train. Improving health, and unremitting occupation in preparing the various Expedition documents for Government, prevented the three weeks

Arrive at Marseilles.

Lazaretto.

spent in the Lazaretto from seeming tedious: a pleasant journey along the coast of France through Brest followed, and I reported my arrival at the office of the Board of Control on August 8. A busy period ensued, attendant on the winding-up of all the affairs of the Expedition.

Return to London.

Settlements with the officers, soldiers, and seamen, for pay, as well as travelling expenses and losses in the 'Tigris;' the return of the chronometers, astronomical and surveying instruments, which had been lent for this service by the Board of Ordnance and Admiralty; preparations for engraving the maps of the River Euphrates, making out an account of the general outlay of the Expedition, with the production of vouchers to replace those lost in the 'Tigris,' were all matters involving serious work and employment of time. To assist in these and other objects, the Master-General of the Ordnance continued the services of two non-commissioned officers—Sergeant-major Quin, Royal Artillery, and Corporal Greenhill, Royal Engineers. The difficulty, however, of replacing all that had been carried to the bottom of the Euphrates in the steamer 'Tigris' was very great, even though each officer at once commenced the task of making out fresh vouchers for his share of the accounts, and the consular agents in Syria were applied to for their part. While awaiting their replies, we were occupied in laying down a duplicate set of maps of the Mesopotamian rivers on a scale of two inches to the mile, one of which was prepared for the engraver; the other was sent out to Lieutenant Lynch, on September 30, to assist him in his future navigation.

Settlement of Expedition accounts, &c.

Lieutenant Lynch appointed to the Euphrates Service.

Early in October, I was occupied in moving, through

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Lord Glenelg, who had succeeded Sir John Hobhouse as President of the Board of Control, to obtain from the Government promotion for the officers of the Expedition.

Maps completed.

In November I laid the completed maps before the Duke of Wellington and Sir Robert Peel, who encouraged me to look for the assistance of Government in bringing out my intended work on the Expedition, and the countries through which it had passed.

Promotion of the naval officers.

Early in 1838, the three naval officers, Messrs. Charlewood, Fitzjames, and Eden, received their promotion; that of Lieutenant Cleaveland was delayed to fill up his sea-time.

Expenditure of the Expedition.

By the beginning of the new year the maps were far advanced, a complete account was rendered to the Treasury of the expenditure of 29,637*l.* 10s. $3\frac{1}{4}d.$,* with the exception of a deficit of 117*l.*,† for which I enclosed a cheque, which was returned to me by the Lords of the Treasury; and I had the satisfaction of hearing that their Lordships considered some mark of approbation due to the Commander of the Expedition.

The Commander recommended to the Government for some mark of approbation.

This recommendation gave me heartfelt satisfaction, the more so as it happened that the Government minute had only been in part carried out by conferring the brevet of Lieutenant-Colonel from April 27, 1838,

* See Appendix II., for details of the expenditure of the Expedition.

† Some years after this time, when reading over the journal of our lamented Fitzjames, this deficiency of 117*l.* was accounted for in a way which had quite escaped my memory. During our transport difficulties between Suedia and the Lake of Antioch, I had given Fitzjames about 100*l.* to pay our native workpeople their wages, the whole of which *he lost* through a hole in his pocket! He duly reported this to me, offering to write to his father for the amount. But this (though he says that the 'Colonel was very angry at the time') I could not allow, and replaced the money out of my own private funds.

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instead of the previous date of November 27, 1834.* Lieutenant Lynch, who was second in command up to the sinking of the 'Tigris,' having been entrusted with the new Expedition, it remains to mention the other gentlemen. The four naval officers were promoted early in 1838, and after a little time Major Estcourt received a brevet Lieutenant-Colonelcy; Mr. Hector continued in charge of the postal line between the Mediterranean and the Persian Gulf; Mr. Taylour Thomson received a diplomatic appointment;† and gratuities were given to the surviving soldiers and seamen. Dr. Staunton and Mr. Ainsworth alone remained, and still remain, of those under my command without some public mark of approbation.

Promotion of the remaining officers.

I did not expect, nor was I in any way prepared for, the serious task of writing a history of the Expedition; but, on being reminded that it was the duty of the Commander to place the result of a national enterprise before the public, rather than employ another pen, as I had contemplated, I consented to make the attempt.

Called upon to write a narrative of the Expedition.

* The date of the brevet rank was chiefly valuable in my estimation as a proof of the approbation of Government. In a minute made by the Duke of Wellington when the preparations for the Expedition were completed, His Grace thus expresses himself with reference to the Commander: 'He should go out as Colonel on a particular service, the highest rank that could be given, and leave the rest to His Majesty's Government.'

This minute was followed by another, in which the President of the Board of Control says:—'I had already recommended Captain Chesney for the rank of Lieutenant-Colonel, on account of his past services, but the rank of Colonel on a particular service has been conferred on him. On the completion of this service in a satisfactory manner, I think it due to Colonel Chesney, that the original recommendation in regard to the rank of Lieutenant-Colonel by brevet should be acted upon—the Lieutenant-Colonel's rank to be dated from November 27, 1834, which is the date of his commission as Colonel on this particular service.'

† Mr. Thomson is now Chargé d'Affaires and Consul-General in the Republic of Chili.

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Plan of the work.

On considering the nature of the task I had undertaken, it appeared to me that I should adopt one or other of two modes of treatment—by giving either a simple official account of what had been accomplished, without reference to the past; or an enlarged review of the whole subject, in its historic connections and political bearing. Having regard to the vast interests involved in the maintenance of our Eastern possessions, and the permanent nature of the communication which possibly might be established in consequence of the Euphrates Survey, the conclusion to which my mind was brought, after long and anxious deliberation, was that, if I attempted the subject at all, it ought to be on the more comprehensive plan.

It was not contemplated that I should receive any pecuniary recompense for these labours; and if the scale on which I undertook them has been of a magnitude disproportioned to the time which I could fairly afford from other pursuits, the loss has been exclusively my own. They who have read my previous volumes will be able to judge of the nature and extent of the

Preliminary researches.

preliminary researches, historical, geographical, and political, on which I have endeavoured to base the Survey in a manner consistent with the extent and solidity of the interests involved. But the production even of that part of the work was retarded by a succession of untoward yet unavoidable circumstances.

Printing commences.

Ordered to China.

Soon after the printing of the first volume had commenced, in 1843, I was ordered on active service in China, as Brigadier commanding the Royal and East India Company's Artillery. When this unavoidable

interruption to the work had terminated on my return to England, after sharing in the expedition against Canton in 1847, I encountered the great disaster of being robbed, in addition to a considerable sum, of the MSS. of the two first volumes, then ready for the printer.*

Robbed of the completed MSS.

When three years of unremitting labour had replaced this most serious loss, the printing was resumed, and continued till the first and second volumes, as well as the maps, including a complete Chart of the Euphrates,† were given to the public.

First and second volumes published.

But in producing the work to this extent, I found that my own advances, in addition to the money drawn from the Treasury, amounted to a sum, beyond which I could not, in justice to myself and others, continue to make private disbursements; and at the same time I became sensible of an increasing indisposition on the part of those having the disposal of the public funds, to continue to apply them on such a scale as the prosecution of the remainder of the work would have required.

Failure of funds to complete the work.

Notwithstanding very earnest representations by the late lamented Prince Consort, Sir Robert Inglis, Baron Humboldt, and others, who were desirous of seeing the work completed, the same unwillingness to make the necessary outlay continued to exist; and the work, as well as the consideration of my own position in regard

Representations of the late Prince Consort, &c.

* A cabman, who had given a false number at the Paddington Station, drove away with my portmanteau. In addition to £840, it contained the MSS. which I had just brought to London for publication. The police never succeeded in tracing him.

† The original Chart of the River Euphrates, on a scale of two inches to a mile, was given by me to the Admiralty—where it still remains—and it is hoped will yet be found useful, whenever that noble river and line of country shall again become the great highway of intercourse between England and India.

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to it, fell into abeyance until 1858, when, on the intervention of Lord Stanley, I was recouped the bulk of my actual expenditure, as it stood when I submitted it to the Treasury in 1854.

Called upon to complete the Narrative.

Called upon again in the past year to resume the Narrative of the Expedition, I have not hesitated once more to give my best endeavours towards rendering this contribution to the public service as complete as my humble abilities enable me to do: and if the work shall hereafter conduce in any substantial degree to the advancement and security of our East Indian communications, I shall not deem my labours unrewarded, nor my time and other expenditure misapplied.

Summary of operations accomplished by the Euphrates Expedition.

The consecutive operations of the Expedition were marked by the following dates or resting-points:—

The transport of all the materials, and the floating of two iron steamers in a perfect state, so as to put the Expedition in motion, March 16, 1836.

The descent and survey of about 1,200 miles of the River Euphrates, completed June 18, 1836.

Examination of the Rivers Karūn and Bah-a-Mishir, September 1836.

Ascent and survey of the River Tigris to Bagdad, September 28, 1836.

First mail taken to Bombay by myself in the 'Hugh Lindsay,' December 1, 1836.

Second ascent of the Karūn by Major Estcourt and the others, in December 1836.

Second ascent of the 'Tigris' above Bagdad by Major Estcourt, January 1837.

DETACHED OPERATIONS.

Survey of the Bay of Scanderoon and coast from thence to Lattakia, completed about May 1836, by Lieutenant Murphy and others.

Summary of operations.

Grand line of levels from the Bay of Antioch to the River Euphrates, which was completed by Lieutenant Murphy, in May 1836, with the assistance of Lieutenant Cockburn and Mr. Thomson. A section of this laborious work is given on Map No. 1.

Scientific journey through the Taurus, so as to connect the sea with the river by geographical lines, completed in February 1836 by Colonel Chesney, Lieutenant Murphy, and Mr. Ainsworth.

Continuation of this journey by Lieutenant Lynch and Mr. Ainsworth, who connected Orfah and Haran with the Euphrates below Samsat.

Pendulum and magnetic experiments at Port William, by Major Estcourt and Lieutenant Murphy, completed in March 1836.

Pendulum and magnetic experiments by Major Estcourt and Lieutenant Murphy at Basrah, completed in August 1836, before the decease of the latter.

The Natural History of the River Euphrates, with a large collection of plants and insects by Doctor and Mrs. Helfer (Germans), who executed this important task, in consideration of a free passage down the river.

A line of levels from the River Tigris near Bagdad to the River Euphrates opposite, by Corporal Greenhill, of the Royal Sappers and Miners—made with the double object of determining the distance of level, and also the possibility of cutting a navigable canal from the one great river to the other.

The discovery of lignite coal above Deir, on the Euphrates.

The discovery of a mine of plumbago in the Taurus, by Mr. Ainsworth.

The discovery of extensive coal and iron mines near the Tigris, by Mr. Ainsworth.

A geological section of the whole country from the Mediterranean Sea to the Euphrates, following the line of levels, by Mr. Ainsworth.

A geological examination of Northern Syria, by Mr. Ainsworth.

A geological examination by him of the Taurus and Anti-Taurus.

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A geological examination of the whole course of the Euphrates below Samsat, say 1,400 miles; of the whole course of the Tigris to Diyarbekr; of the greater part of the Karūn, the whole Bah-a-Mishir, and the southern part of Persia—viz., from Persepolis to Bushire.

The Expedition was finally broken up by Major Estcourt, agreeably to the orders of the President of the Board of Control, at Bagdad, January 25, 1837.

Since the above summary of the results accomplished by the Euphrates Expedition was prepared, on my return to England in 1837, the question of a steam-communication with India through Turkish Arabia has remained comparatively in abeyance, although the information obtained, with regard to the rapidity of transit and commercial advantages of that line, have been such as to place its desirability beyond all doubt. Its directness, and consequent superiority over the present Overland Route to India, are now patent to everybody, and require no exemplification. Its commercial advantages will be equally apparent to the reader, if he will take the trouble of looking over the following statistics of trade through Arabia in 1855, furnished by Mr. Barker, then acting as Vice-Consul at Aleppo,—and given to me when I revisited Syria in 1856, in company with Sir John MacNeill and a staff of engineers, for the purpose of assisting in a careful re-survey of the Bay of the Orontes, and of the country lying between the Mediterranean and the Upper Euphrates, with a view to a line of railway from the coast to the river passing by Aleppo.

Advantages of the Euphrates over the Red Sea line.

According to Mr. Barker's statement, it appears that the imports to and through Aleppo, in 1855, amounted

to about £1,414,059, and the exports to £1,254,130, irrespective of an internal trade with Turkey, which in 1856 reached £1,079,556. The statistics are as follow:— Imports and exports of Aleppo.

TOTAL AMOUNT OF VALUE OF GOODS IMPORTED FROM GREAT BRITAIN INTO SYRIA IN 60 VESSELS IN 1855.

21,368 bales Manufactures	at £20	£427,360	In 1855, 60 vessels from Great Britain, with £471,353.
467 bags Pepper and Pimento	„ 3½	1,634	
943 barrels Sugar	„ 5	4,715	
534 bags Coffee	„ 4	2,136	
123 cases Cochineal	„ 50	6,150	
51 „ Indigo	„ 80	4,080	
1,435 packages Drysalteries	„ 3	4,305	
6,991 „ not declared	„ 3	20,973	French, German, &c. in 1855, £471,353.
		471,353	
French, Italian, German, Swiss, less in quantity, but greater in value, about as much		471,353	
Coasting trade from Constantinople, Greece, Smyrna, &c. about as much		471,353	Coasting trade in 1855, £471,353
		£1,414,059	

EXPORTS OF ALEPPO IN 1855.

120,000 quarters Wheat	at £2	£240,000	Exports from Aleppo in 1855.
50,000 „ Barley	„ 1¼	62,500	
25,000 „ Millet	„ 1¼	31,250	
2,500 tons Flour	„ 12	30,000	
5,000 „ Sesame Seed	„ 18	90,000	
750 „ Galls	„ 65	48,750	
1,000 „ Cotton	„ 36	36,000	
2,000 „ Wool	„ 40	80,000	
Allow for sundry articles as above		150,000	
Internal trade to Constantinople, Smyrna, &c., as above		485,630	
		£1,254,130	

The prices are the average at Aleppo.

According to Consul Kennedy's Report to the Foreign Office in 1855, 181,100 tons of goods were sent to and through Aleppo from the coast in that year, and 179,800 tons passed from that city for export, at a cost, for the transport alone, of about £200,000. Cost of transport.

CHAP. XX.

Present state of trade in Lower Mesopotamia.

The foregoing details give an approximate idea of the commerce existing ten or twelve years ago on the western side of Turkish Arabia, while the subjoined account, by Captain Lynch, C.B., of the present state of trade in Lower Mesopotamia, furnishes additional valuable information :—

'*Note on the present State of Commerce on the Euphrates and Tigris.*

Present state of communication *viâ* the Euphrates.

'We must regard with interest the progress made, in the countries bordering the Euphrates, since the Expedition recorded in these pages. An unbroken line of steam-vessels now conducts the traveller from London to Bagdad, the ancient seat of Arab empire on the Tigris, in a period of from five to six weeks. The vessels of the Peninsular and Oriental Steam Navigation Company from England to Bombay are connected three times a month, by the steamers of the British India Company, with Basrah, whence the steamers of the Euphrates and Tigris Steam Navigation Company maintain the line to Bagdad, carrying mails, passengers, and merchandise.

Steam-vessels on the river.

'The Turkish authorities at Bagdad have two small steamers on the river, and three others are in course of construction at Basrah. The Indian Government also maintain an armed steamer at Bagdad, for the service of the Residency.

Telegraph to India through Bagdad.

'The telegraph to India passes through Bagdad, and we have frequently had replies to messages from London on the following day. No doubt very great improvements may yet be made in the mode of working it; and a line will probably be continued from Bagdad, through Persia, to Bunder Abbas and the Mekran coast to Kurrachee, thus continuing the land-line all the way from England to India. A future railway will probably follow the same route. There is certainly no land-line to India which offers so many advantages, whether as regards distance, position, sea and land communication, climate, and nature of the country.

Increase of trade

'The trade between India, England, and the ports of the Persian Gulf and the Euphrates, has increased in an extra-

ordinary degree since the Expedition first drew attention to these countries; and the exports of wool, cotton, opium, and grain of every description are greatly increasing, and offer a field of supply almost unlimited. Many of the European nations are now represented by mercantile firms at Bagdad, and a bank* on the English system has been established there, and is daily increasing its business.

between India and England.

English bank at Bagdad.

'Since the first Expedition, the rivers have been again examined, with more time for a careful survey; and although the Euphrates—from its mighty torrent in the full season, when the snow melts on the Taurus, and its shallow pool-like state in the dry season—is unfitted for the purpose of swift unbroken steam-navigation, yet for all the requirements of interfluvial communication and irrigation it is as unrivalled as its valley is rich in all the products which love a rich soil and a glowing sun. We found no difficulty from the Arab tribes, and none is to be anticipated from them, to the project of a railway along the valley. As our knowledge of their customs and our communications with them increased, so were our relations more and more cordial; and we could depend on them for any services in their power to render, either as messengers to carry the mails, or to procure and furnish us with such supplies as the country affords.

Capabilities of the Euphrates river and valley.

Cordial relations existing with the Arabs.

'Much as the Expedition has awakened the attention of the people on the spot, and increased their means and desire for increased commerce with Europe and India, in a far greater degree has the attention of the Great Powers of Europe been drawn by it to the Euphrates. No Power can hope to hold an exclusive interest on the Euphrates. A mighty stream of over 1200 miles from the Taurus to the Persian Gulf, running through the richest valley in the world, with immense plains on either hand, it divides the East from the West. The seat of ancient empires, it was never until desolate and strewn with ruins under one sceptre, and must again become the home of the surplus population of Europe. The Expedition has awakened the nations of Europe, and they will now discover the interest they have in the rehabilitation of the Euphrates, and uniting

Importance of the Euphrates river and valley to Europe at large.

* The London and Bagdad Banking Association (limited).

CHAP. XX.

probably in a more fair and cordial support of the Turkish Empire—the only instrument for the purpose—make the valley of the Syrian river the path to the rich commerce and resources of the East.'

H. BLOSSE LYNCH.

London, July 18, 1868.

This statement seems to tell us, incontestably, that but little impetus is required, in the way of improved facilities of transport, to create a great increase of traffic in that part of the world.

Indian system of railways.

The Indus has been most successfully opened up by lines of railway and steam-flotillas, carried out almost entirely by the persevering energy of Mr. W. P. Andrew, Chairman of the Scinde and Punjaub Railway Companies; consequently, but little more is now needed to complete a working line of communication by railway through Mesopotamia, with steamers for the Persian Gulf, which would give the means of rapid intercourse between Great Britain and India, at an estimated cost of about £1,000,000.

Postal communications with India in the last century.

Some 50 or 60 years ago a letter was five or six months in reaching India from England; and even when the improved arrangements of the line through Arabia, as organised by the Marquis Wellesley, existed, the despatches were from 68 to 85 days in reaching Bombay, during the momentous period of the war with France.*

Actual postal communication, and prospects of its acceleration.

Letters now reach India, by the Red Sea route, in 28 days, or even less; and at no distant period, letters sent through Brindisi and Turkish Arabia will reach Bombay in from 12 to 14 days; while, in case of urgent necessity,

* See pp. 329, 330.

a very little additional time will enable us to transport troops to Central Asia, ready to take the field.

Campaigns in Afghanistan,

This is no visionary project. Our Indian Army has carried out, most successfully, two very distant and exceedingly difficult campaigns—the one, Sir George Pollock's march through the wildest and most difficult passes of Afghanistan, in the face of a powerful enemy; the other, Sir Robert Napier's safe-conduct of his troops over the winding and almost impracticable mountain passes to the westward of the Red Sea. In either case, under less able commanders, it might have been of vital importance to have had it in our power to supply reinforcements with the least possible delay. By the Euphrates Route alone could this have been effected rapidly in the case of Afghanistan, where, in addition to the apparently almost insurmountable difficulties offered by the nature of the country, Sir George Pollock had to lead his men against a brave and warlike people, and to enable his troops to regain that prestige which had been lost by our previous disasters in Cabul. I must be permitted here—although it is somewhat of a digression—to offer my tribute of admiration to the commanders and troops who have so happily carried out these two most extraordinary expeditions, and which in the latter case has been so signally rewarded by our gracious Queen.

and in Abyssinia.

Reinforcements for India *viâ* the Euphrates.

When the first volumes of this work were going through the press (in 1851), the Caucasian tribes were still free and independent, as well as those lying to the westward of the Caspian Sea. Now the Caucasus is Russian territory, and the power of the Czar has spread rapidly to the westward. Persia remains

Advances of Russia towards India.

CHAP. XX.

passive, whilst the armies of Russia have not only occupied the distant city of Samarcand, but are gradually drawing nearer and nearer to Herat and Cabul.

Our security in the consolidation of our overland communications.

If we would not see her troops occupying the right bank of the Indus, let us fully realise the *possibility* of such an event; and it will then at once be found that we possess ample means for averting the dangerous moral effect of the advance of an enemy to the very boundary of our Indian Empire, in the consolidation and perfection of our overland communications between Great Britain and India.

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APPENDIX I.

LETTER FROM CAPTAIN CHESNEY TO SIR ROBERT GORDON, ON THE OVERLAND ROUTE VIÂ EGYPT.

Jaffa, September 2, 1830.

APPX. I.

Examination of the Egyptian route.

SIR,—I have realised the intention, communicated to your Excellency in my letter from Cairo (dated June 7), of visiting Suez, Lake Menzaleh, &c., and also sailing down the Red Sea to Kosseir, from whence I again crossed the Desert to the Nile; endeavouring to ascertain, during these journeys, what impediments and facilities exist with regard to a steam-communication by one of those routes to India.

It is with some degree of hesitation that I venture to touch upon a subject so foreign to my profession, and attended with some difficulties; but steam-navigation is undoubtedly less complicated than that of sailing-vessels, and its extension to more distant countries has long interested me: indeed, so long as ten years ago, I made some calculations as to the feasibility of the communication with India through Egypt and the Mediterranean, leaving the mails at Gibraltar, Malta, and perhaps Cape Matapan (for Greece); and although I did not then bring the subject forward, the consideration of the question naturally prepared my mind for the local examination just completed; the result of which I shall proceed to give, trusting your Excellency will bear in mind that I am not a nautical man, and therefore have a claim to allowances for any errors which may arise from this circumstance, particularly as I hope they will not be so serious as to mislead anyone in considering the grand question itself.

Steam-communication by the Mediterranean, Egypt, &c.

The Red Sea offers some serious difficulties to the navigation

of sailing-vessels: its western side is shallow, owing to coral reefs; and when the wind is not so favourable as to permit their keeping the Arabian shore on board, they are naturally exposed to much danger on the Egyptian side. For five months, beginning from the middle of May, the wind blows steadily and moderately down the Red Sea, during which period vessels must beat up the whole of the way they have to go; and as the Arab navigators neither know the use of the compass, nor the bearing of the stars, they invariably come-to every night; consequently the voyage to Suez, &c., would be exceedingly long, if it were undertaken at all in this season of the year, when all navigation may be said to cease; for if there be not the supposed time for the vessel to reach her destination early in May, she almost invariably waits until the autumn, when southerly winds set in, so as to give a speedy passage, and having a fair wind, also a safe one, through the deep water on the Arabian side, where there is a space sufficiently broad and free from obstructions.

Navigation of Red Sea; its five months' periodical winds.

Ignorance of the Arabs of this sea.

Deep water on the Arabian side.

It is evident that the foregoing difficulties do not apply to steam-vessels, which can make a straight course at all times, and which could ascend the Red Sea against the moderate winds prevailing there, at the rate of 6 or 7 knots per hour, even when she is most impeded; for I apprehend that a violent gale of wind is a rare occurrence in that sea, and that the sequel would prove, that a steam-vessel of moderate power can ascend with much rapidity, even at the most unfavourable moments; so that there remains but one serious difficulty—the coals, and this could be overcome by forming depôts at Mocha, Aden, or some other place near the Straits of Babel-mandeb, to which they could be transported in many ways: for instance, by Lake Menzaleh, and across the isthmus on camels to Suez, or up the Nile to Kenné, and across to Kosseir on camels, at a contracted rate of 8 or 10 piastres (16*s.* or 18*s.*) for 9 or 10 cwt.; and still cheaper were an establishment of camels to be kept for the purpose, as is done by the Pacha, allowing only 4 piastres for each journey to the Arab who feeds, keeps, and conducts the animal.

Advantage of a steamer.

Coal depôts to be formed at Mocha, &c. and sent thither by Suez, the Nile, and Kosseir.

Expense.

The transport up the Nile is known to be very moderate; so would the subsequent part be from Kosseir to Mocha, and in this way the depôt could be speedily formed at a moderate

Vessels from Kosseir to Mocha.

APPX. I.

expense, unless it should prove less expensive to send the coals thither altogether by sea.

The necessary fuel (whether coals, charcoal, oil, or wood) being placed near the Straits of Babelmandeb, the next question is, how high up the Red Sea it would be most desirable the steamer should ascend? Kosseir offers one route: its port is an open one, but perfectly safe, with sufficient water within 300 yards of the shore, and a Tartar, on a dromedary, can reach Cairo and Alexandria in the course of ten days.

Route to Kosseir.

Tartar from Kosseir to Alexandria.

Admitting that this is not an extreme case, it is evident that it can only apply to despatches, and the officer carrying them, and that passengers would either take much more time, or choose the easier route of crossing to Kenné, and descending the Nile, which would consequently either separate the passengers, parcels, &c. from the mails and despatches, or involve the delay of the latter, at Alexandria, until the former could arrive; for which reason, if the route by Kosseir were adopted, the traveller might pass from the shores of the Red Sea to the Mediterranean in eleven or twelve days—namely, two days from Kosseir to Kenné, and nine or ten in descending the Nile to Alexandria.

The Desert route from Kosseir to Cairo: objections.

Transit through Egypt.

This time, however, might be materially shortened, by the use of a river-going steamer, such as those on the Clyde, some of which only draw about 18 inches water; and one a good deal deeper, say 2½ or 3 feet, could ascend and descend the Nile at all times to Rosetta, which is only 6 hours by the Desert from Alexandria. From Kenné to Rosetta the distance is about 380 miles, and a vessel going 8 knots an hour would accomplish this *upwards*, against the stream of 2½ miles per hour, in about 70 hours, and *downwards* in 42 or 50 hours, including 8 hours to go from Rosetta to Alexandria; so that the journey from Kosseir to Alexandria would be performed in 86 or 90 hours, and that from the latter to the former in 114 or 116 hours, with very little fatigue or real difficulty; and having made contracts for their carriage, and the other necessary arrangements about coals, &c., the expense of the whole would be sufficiently moderate.

A river-going steamer on the Nile; her depth; time and distance, &c.

Upwards of 70 hours downwards, 42 or 50 to Rosetta.

86 or 90 hours from Kosseir to Alexandria, and the reverse 114 or 116 hours.

The next route that presents itself is by Suez, which port the steamer would reach in about 25 hours more than she

Route by Suez.

requires to go to Kosseir; here there is a safe anchorage and shelter within five miles of the town, and she cannot go higher until the sand is removed, which chokes the passage up to the town, in which there is a depth of 7 or 8 feet only. The subsequent difficulties in crossing the Isthmus, and embarking, are greater than those attending the port of Alexandria, but, were they once overcome, the route of Suez would be still quicker.

The Isthmus.

Before, however, I enter more into its details, it will be necessary to endeavour to describe the situation of Damietta and the adjacent coast, with the impediments when embarking, &c. Damietta is on the right bank of the eastern branch of the Nile, and at about 8 miles from its mouth, where there is a bar of about 150 yards long, having rather less than 4 feet water when the Nile is at the lowest, and about 7½ feet when at the highest, formed by the deposits of the river, which have been allowed to accumulate from time immemorial, without any efforts whatever being made to remove this serious impediment, which obliges all vessels to take in and discharge their cargoes outside the river, where they anchor in moderately safe ground, and the goods are transported in 'germs' (a sort of lighter), which pass constantly to and from Damietta over the bar, the rest of the river inside of it being sufficiently deep. In bad weather the vessels run from the mouth of the river to a bay formed by a neck of land projecting NE. of the Nile, and distant (from the bar) about 4 miles; this anchorage—called 'Tachtarass' in Arabic, and 'Cambroon' in Italian—affords sufficient water for large vessels at between 1½ and 3 miles from the shore, with sufficient space for a small fleet to anchor, and smooth water for the boats to communicate with the shore. The bay is open to the NE., but vessels are considered secure at single anchor; and as no accidents are remembered, or at least spoken of, it may be concluded to be really safe. Tachtarass is about 8 miles from Damietta by land, chiefly along Lake Menzaleh, from which a part of the anchorage is separated by a narrow strip of land, and through which there is a communication for boats, by the passage of Stomo-Suan, 4 or 5 feet deep, leading from the bay into the lake.

Outline of the topography of Damietta, &c.

Its bars.

'Germs.'

Bay of Tachtarass.

Good anchorage.

Distance from Damietta.

Passage of Stomo-Suan to Lake Menzaleh.

Running ESE. from Tachtarass, is the narrow strip of

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Description of Lake Menzaleh.

sandy land separating Lake Menzaleh from the sea, and through which are the entrances—Stomo-Suan, about 3 miles from the anchorage; that of Bocca Dibeh, at about 10 or 12 miles; that of Stomo-Gemileh, at 15 or 16 miles; and, finally, the ancient one of Tineh (now closed), at 25 or 28 miles from thence.

Extent of Lake Menzaleh, &c.

Lake Menzaleh begins about 1½ mile from Damietta, and is an irregular parallelogram, nearly 43 miles from ESE. to WNW., and from 11 to 12 miles broad, NE. and SW. from the sea to the land side; the bottom is a mixture of mud and sand, generally covered with reeds, but quite level; so that the greatest depth of the lake does not vary more than 6 or 8 inches, being rarely much under 4 feet, and seldom materially above it, *except* where the sea enters.

Bottom depth.

Islands.

There are a great number of small grassy uninhabited islands spread over the lake, between which the numerous

Boats.

fishing-boats pass in every direction with the utmost facility; and by placing nets and reed inclosures in certain places,

Fish.

they take sea-fish with a facility and to an extent unknown elsewhere. The boats are very numerous, having an open grating or well to keep some of the fish alive, and of a construction at once broad and sharp underneath, so as to give speed with little draught of water, yet carrying a good deal —some more than 20 tons, but the smaller only 8 or 10; and instead of rowing, they are propelled by poles against the bottom, when the wind is not favourable for the use of sails.

Fishermen; towns on the eastern side of the lake.

The fishermen live at the towns on the southern and eastern borders of the lake—viz., at Menzaleh, which is on the canal from Mansoura, and one hour distant from the lake; at Matarieh, which is on it; at Saan, which is two hours distant, but connected by means of a canal; and finally at Tineh, a village constructed by the French at about 200 yards beyond the eastern extremity of the lake, but still communicating with it by means of a small canal.

Tineh, and the French cut, &c.

Tineh opens towards the sea, and has the advantage of anchorage in good weather a little way from the shore; and the French made a cut (for their army going against Syria), so as to permit its passing from the lake to the seacoast opposite Tineh, without being exposed to the fire of our ships. This

passage is now closed; but were it reopened, it would offer the easiest and shortest route to Suez, there being but 2½ days, or 30 hours, of pilgrim's travelling over the Desert to that place from Tineh.

Tineh to Suez, 2½ days.

The next shortest route is that of Saan, now most in use by the Mecca pilgrims from Damietta. This village is two hours from the lake near Matarieh, to which it is joined by a small canal, with from 3½ to 4½ feet water, down and up which the boats pass at all times to fish. A line drawn from Damietta to Suez would pass over about 35 miles of the lake to Matarieh, which distance is considered 16 hours' work for the country boats, when propelled the whole way by means of poles; and the remainder of the way from Saan to Suez is three days, or 36 hours of caravan-time. Therefore putting out of the question the removal of the sand to open the bar of Damietta, there remains the resource of the Bay of Tachtarass, where a steamer might await in safety; and with one intervening station in the Desert, to give a relief of animals, the journey from Suez to Saan would be performed in 24 or 28 hours, and the subsequent part over the lake, with a small steamer or swift-rowing boat, in 8 or 10 more, going straight to the western extremity of the lake, and through the passage of Stomo-Suan to the anchorage of Tachtarass, the place of embarkation, which would be reached in 56 or 62 hours from the latitude of Kosseir, whilst the route from the latter to Alexandria by the Nile would consume 86 or 90 hours.

Saan route now most in use by pilgrims.

Distance, time, &c. to Suez.

Removal of Damietta bar. Tachtarass bay, &c.

Suez to Saan, 24 or 28 hours.

A swift boat in the lake to communicate with Tachtarass.

In addition to the consideration of less time, the route of Suez would also have the advantage as to the facility of transporting coals. The Arabs of the Isthmus and those of Mount Sinai are easily dealt with; they are content to make the journey for 16 piastres; and anything like permanent employment would be hailed with joy, and reduce the rate to 8 or 10 piastres for each camel carrying from 7 to 10 cwt. A party of those of Mount Sinai followed me some distance, in the hope that I would take them *one* day's journey, and they go as far as Cairo in search of employment; so that, unless some intrigue should be *used* at Alexandria, there can be little doubt that coals might be carried across Lake Menzaleh, and thence to Suez, or even Mocha, at a

Facility as to coals *viâ* Suez.

The Arabs well-disposed to work on moderate terms.

Coals may be transported to Mocha by this route.

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moderate expense; and the consumption on the Red Sea would prove much less than the same distance elsewhere, because, for a considerable portion of the year, there is a fair wind *down* at one period, and *up* at the other, which would make it well worth while to unship the paddles, since the vessel could easily make 8 or 9 knots without steam, having a nice breeze and smooth water. The Arab junk hired to take me to Kosseir (from Suez) made that voyage (of 300 or 320 miles) in four short days, or 37 hours of actual sailing, anchoring at night, as they invariably do.

Use of sails by the steamer, during the periodical winds, &c.

Time from Suez to Kosseir.

In this view of the question, there remains only one case where a difficulty might arise in the sequel—namely, if the roadstead of Tachtarass should prove less safe than I have ventured to represent it; but I believe it will be found sufficiently good to be adopted, unless that of Alexandria be ultimately preferred: and there are, besides, two other resources by the route of Suez, one or both of which would be available, and become still more advantageous as to time.

If Tachtarass fails,

two resources:

The first is the removal of the bar at Damietta, by no means a difficult task with machinery, and in which expense the merchants would readily join.

1st, removal of Damietta bar; and

The second is the improvement of the Boccaz of Stomo-Gemileh, also opening that of Tineh, so as to communicate with Suez by the latter place, thus avoiding Damietta altogether.

2nd, opening Stomo-Gemileh, &c.

Stomo-Gemileh is at times resorted to by small Syrian vessels for shelter in bad weather; it opens about NNE., and is nearly half a mile long, and 50 yards wide. The least depth of water I found exceeded eleven feet; but as I was beset by the Arabs during my observations, and met some annoyance, I cannot be *quite* positive that this is the least depth, though I believe it to be so, and that at all seasons of the year—for there is no current to form a deposit here, as is evident from the Boccaz having remained so long open. The land is low and sandy on each side of the entrance, and the surf moderate, owing to the opening inclining towards the Syrian coast. Once inside of the Boccaz, the lake is met at six feet deep, and farther inwards its depth decreases to about four feet.

Its description.

Depth of water.

The surf.

I feel convinced, from the nature of the soil, that this

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opening would be easily enlarged by machinery, so as to admit a steamer with more facility, and that, once enlarged, it would long remain so: in addition to this labour, however, it would be desirable to form a kind of small basin, immediately inside of the entrance, merely by driving a slight row of piles, to keep out the deposits of the lake; and thus enable the vessel to remain afloat, and ready for sea, at all times.

Once opened, it would remain so.

Basin of steamer formed by a row of piles.

Stomo-Gemileh would have two ways of communicating with Tineh—the one inside of the lake, the other outside by sea in calm weather—and either to be accomplished in less than three hours, with a fast boat; so that from Suez to the steamer, or the reverse, would require but 27 or 30 hours at the outside.

Communications between Stomo-Gemileh and Tineh. Suez to the steamer, 27 or 30 hours.

In the other opening of Dibeh (8 or 9 miles westward), which has a castle, erected by the French, for its defence, I found but 5 and 6 feet water, throughout nearly a mile in length, and 100 yards in breadth; it is capable of much improvement, but at a far greater expense than the other; and when finished, it would be more distant from Suez.

Opening of Dibeh.

I have some reason to believe that the Pacha, whilst he may avowedly consent, and promise assistance, would *secretly* make difficulties, and use intrigues, to counteract communication through his territories; as it is natural he should not desire to make Egypt the channel of such an important intercourse as must draw the attention of Europe to that part of the world. But were he heartily to sanction and second this project, the intercourse might be immediately opened through Tachtaraas, with a swift boat on the lake, going thither from Saan, through the passage of Stomo-Suan, and sending coals in this way to Suez; until, as a more permanent arrangement, either the bar of Damietta be removed, or the passage of Stomo-Gemileh and Tineh be opened more effectually in order to cross the Desert to Suez from the latter point.

The Pacha's secret wishes as to steam, &c.

Temporary arrangements, and permanent ones.

By the route of the Nile and Kosseir, the Pacha could hardly manage to create any serious difficulties. That river is the beaten highway for all transport in Egypt, and the expense of boats, and all else, is not only moderate, but so well understood, that no difficulties could be made which would

The route of the Nile more open, and little difficulty.

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not have a general application to the commerce of the country itself. Therefore, to put steam in operation by the Nile, nothing more seems to be requisite than the construction of a small vessel, adapted to a river; by having a good deal of width of beam, and little depth, manned with eight or ten men, to navigate her between Rosetta and Kenné, or Coptos; where a depôt of fuel would be formed, by transporting it from the sea thither in the common Nile-boats (known to all the world to be sufficiently cheap), unless it should seem preferable to purchase charcoal, at the rate of 8 or 12 piastres for a common sackful, being the market-price of this article in Kosseir, brought thither from a distance of several leagues, by the Ababdi Arabs; with whom alone there would be the *possibility* of any intrigue, so as to produce annoyance, in passing the Desert; and it would be much easier to keep them quiet by means of a little money, and constant employment, than for the Pacha to *stir* them up: they are, besides, not at all difficult to deal with, and far from formidable, in disposition, towards others.

Small steamer on the Nile.

Depôt of fuel, &c.

Charcoal.

Ababdi Arabs easily dealt with.

Any of these routes, however, which may be adopted, will probably only pave the way to the realisation of the grand idea, so long indulged in England and other parts of Europe, of connecting the Mediterranean with the Red Sea. A little time will probably remove the ill-founded apprehension of increasing the height of the former by the influx of the latter; for whatever natural causes can be supposed to exist likely to maintain the Red Sea at a higher level, can hardly fail to influence equally the Mediterranean at the distance of little more than 60 miles. The land, it is true, shelves gradually from the Red Sea to the western shore of the Isthmus, at a mean difference of 18 feet, according to the French engineers. But it is very questionable whether the sea itself is really higher, communicating, as it does already, with the Mediterranean, round Africa; but even if it could prove so,* an additional inlet will no more increase the height of the latter sea, than do the unceasing, and infinitely *more* voluminous ones, pouring in from the Atlantic on one side, and Black Sea on the other; for the surplus is, and equally would

Opening through the Isthmus of Suez.

Level of the Red Sea and Mediterranean.

* It is taken for granted that there is no such thing as a level, as regards the sea, which takes the same curve as the earth itself.

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be, disposed of by evaporation, when *seemingly* greater, because the influx must be regulated by the quantity of water exhaled; and, I apprehend, can neither be more nor less, whether supplied through *one* or *six* inlets; on which principle the Mediterranean (when it shall communicate) would as readily give to, as receive from, the Red Sea, were not the temperature of the latter, and its exhalation, lessened by the cool north winds prevailing during the heat of the year; for which reason, only a moderate current may be expected to run into the Mediterranean; and it is, in fact, rather to be feared that such an inlet would not give a sufficient body of water to open a noble passage for ships of moderate burthen, than that any prejudicial increase should be the consequence to the shores of the Mediterranean.

Communication between the Mediterranean and Red Sea.

As to the executive part, these is but one opinion. There are no serious natural difficulties; not a single mountain intervenes, scarcely what deserves to be called a hillock; and in a country where labour can be had without limit, and at a rate infinitely below that of any other part of the world, the expense would be a moderate one for a single nation, and scarcely worth dividing between the great kingdoms of Europe, who would be all benefited by the measure.

No natural difficulties in the way.

Were the Pacha and Sultan to consent heartily, the former could employ 500,000 Arabs on this work, as he did on the Mahmoudieh Canal; feeding them out of his stores, so as to put nearly the whole of the contracted sum into his pocket. Mehemet Ali is fond of speculations, and this would be a grand and beneficial one for the world, as well as a paying one for his coffers.

Employment of Arabs on this work.

I have the honour to be,
Your Excellency's most obedient humble servant,
F. R. CHESNEY, Captain R.A.

To His Excellency the Right Hon. Sir Robert Gordon,
G.C.B. and G.C.H., &c., &c., &c.—Constantinople.

APPENDIX II.

GENERAL ACCOUNTS OF THE EXPEDITION.

APPX. II.

Expenditure during the Euphrates Expedition (pp. 70 and 71 of Parliamentary Papers).

THE following Statement of Expenditure during the Euphrates Expedition (from 1834 to 1838), is given from the Papers submitted to both Houses of Parliament, and ordered to be printed February 22, 1838 :—

ABSTRACT STATEMENT of the EXPENSES of the EUPHRATES EXPEDITION, under the Command of Colonel F. R. CHESNEY, R.A.

ITEMS.	Amounts.		
	£	s.	d.
Cost of the large iron steamer called 'Euphrates,' of 108 feet length, 19 feet beam, with two engines of 25-horse power each, including bedding, furniture, crockery, cooking utensils, &c.	6,093	15	0
Cost of the smaller iron steamer called 'Tigris,' of 68 feet length, 15 feet beam, with two engines of 10-horse power each, including bedding, furniture, crockery, cooking utensils, &c.	2,040	0	0
Additional ship and other stores provided at Liverpool: 137 tons of coal, 400 sacks for ditto, spare iron, plank, canvas, blocks, and tackle, cordage, and sundry shipping expenses, including boat-hire, porterage, and steamer towing out of docks, &c.	821	12	8½
Stores supplied by the Ordnance, consisting of six 9-pounder carronades (iron), and one brass 1-pounder gun, with their carriages, complete; twelve 1-pounder brass swivel guns, eight wall-pieces, 60 muskets and bayonets, 16 rifles and bayonets, 40 carbines, 100 pistols, 80 swords (light cavalry), 50 cutlasses, 6- and 3-pounder Congreve and 1½-pounder Whale rockets, with double set of tubes to each nature; signal rockets; spherical and tin case shot; a large supply of ammunition; six infantry cylindrical pontoons; three marquees, ten bell and two observatory tents; mining, armourers', smiths', and carpenters' tools; four platform and one pontoon waggon; harness for horses; diving-			
Carried forward	£8,955	7	8½

ABSTRACT STATEMENT OF EXPENSES—*continued.* APPX. II.

ITEMS.	Amounts. £	s.	d.	
Brought forward . . .	8,955	7	8½	Euphrates Expenditure continued (pp. 70 and 71 of Parliamentary Papers).
bell, with air-pump; buoys, mooring-chains, and numerous other stores; also expense of instructing miners at Chatham . .	2,123	4	7¼	
An assortment of goods from Sheffield and Manchester, for presents to the Arabs, consisting of fowling-pieces, double and single pistols, swords, shut knives, table knives and forks, spoons, finger and ear rings, with an assortment of soft goods from Glasgow	2,200	0	0	
Payments through the Ordnance for instruments, and the repair of others returned . .	1,050	10	5	
Cost of provisions from His Majesty's stores at Cork	143	6	4	
Ditto ditto and stores from ditto at Malta .	751	8	8	
Cost of provisions, &c., from the Hon. East India Company, Bombay	361	7	1	
Fresh provisions at Cork for present use . .	38	19	2	
Ditto ditto at Malta for ditto . .	93	19	5½	
Freight of the ship 'George Canning,' to convey the Expedition, with steamers and stores, to the Syrian coast	931	14	6	
Cost of coals conveyed to the Persian Gulf by the Hon. East India Company . . .	329	3	4	
Expense of transporting the steamers and stores from the Mediterranean Sea to the River Euphrates—viz., 840 camels and 160 mules .	998	5	3½	
Payments by Major Estcourt on this account	504	15	6¾	
,, Lieut. Lynch, Indian Navy, ,, .	192	7	7	
,, Lieut. Cleaveland, R.N. ,, .	634	14	3	
,, Mr. H. Eden, R.N. ,, .	265	17	0½	
,, Mr. Charlewood, R.N. ,, .	534	16	1¾	
,, Mr. Fitzjames, R.N. ,, .	270	14	10½	
,, Lieut. H. F. Murphy, R.E. ,, .	15	5	11	
,, Mr. A. Hector . ,, .	168	15	0½	
,, Mr. W. Ainsworth . ,, .	61	18	1¼	
,, Lieut. R. B. Lynch . ,, .	65	19	9½	
,, Mr. C. Rassam (interpreter) ,, .	410	8	0½	
,, Mr. W. Elliot ,, ,, .	46	1	10¾	
,, Mr. Seyd Ali ,, ,, .	5	16	0	
Passages of ten workmen returning to Liverpool, with freight and insurance of several cases containing papers and fossils . . .	192	10	2½	
Payments to nine officers, sixteen artillerymen, four sappers and miners, thirty seamen, and				
Carried forward . . .	£21,347	7	0¼	

APPX. II.

ABSTRACT STATEMENT OF EXPENSES—*continued.*

Euphrates Expenditure continued (pp. 70 and 71 of Parliamentary Papers).

ITEMS.	Amounts. £	s.	d.
Brought forward . . .	21,347	7	0¼
seven Maltese, from the 24th September 1834, the date of the sappers commencing work at Liverpool, and the 18th May 1837, the return to England of the Expedition . . .	4,020	17	9
Pay to two engineers, two carpenters, and seven boilermakers, civil workmen taken from Liverpool	2,269	19	11
Expense incurred in the repair of roads in Syria, with Lieut. Lynch's journey from England to forward the same	878	1	7½
Erection of houses, workshops, slips for vessels at Port William, with deep ditch to enclose the whole; superintended and paid by Lieut. Cockburn .	196	1	1
Surveying and carrying a line of levels from the Mediterranean Sea to the River Euphrates; finished by Mr. W. T. Thomson . .	157	4	1½
Conveyance of the Indian mail to England after the accident to the 'Euphrates' engine, with Seyd Ali's losses (£15) on that occasion .	154	4	4
Gratuities granted to soldiers and seamen. .	333	0	0
„ „ civil workmen . .	140	0	0
Amount of general supplies of provisions and stores, from May 1825 to Sept. 1836, by Mr. Kilby, at Aleppo, including commission at 2 per cent.	2,054	13	6
To Mr. Laird at Liverpool, commission, at 5 per cent., on payments made by him to workmen and others	131	14	8
To Messrs. Hunter and Ross at Malta, for supplies and payments made to the families of Maltese employed on the Expedition . .	375	13	8
Expense in boat-hire, conveying coals, and other expenses in forming depôts of fuel on the River Euphrates	575	14	3
Spare stores and engineers' tools furnished by Mr. Fawcett; also repair of 'Euphrates' engine .	191	7	11
Colonel Chesney's travelling and other expenses to Liverpool and back to London, superintending the preparations of the Expedition . .	218	15	8
An anchor supplied by the Master of the 'George the Fourth' for the 'Euphrates' steamer .	3	17	0
Compensation to officers and men for losses in the 'Tigris' steamer, as per annexed Account .	2,231	9	3
Current expenses of the party for provisions, purchase and keep of horses and bullocks; hire of native smiths, carpenters, masons, and la-			
Carried forward . . .	£35,280	1	9¼

APPX. II.

ABSTRACT STATEMENT OF EXPENSES—*continued.*

ITEMS.	Amounts. £	s.	d.
Brought forward . . .	35,280	1	9¼
bourers; with purchases of timber, charcoal, iron, &c.; after deducting 396*l.* 17*s.* 5*d.* for the sale of goods, passage-money received, &c.	4,718	1	3
Deduct the value of the steamers, arms, ammunition, instruments, and stores turned over to the Hon. East India Company .	39,998	3	0¼
	10,360	12	9
Actual expense of the Expedition . £	29,637	10	3¼

Euphrates Expenditure continued (pp. 70 and 71 of Parliamentary Papers).

February 5, 1838. F. R. CHESNEY.

ADDITIONAL EXPENDITURE for PAYMENTS made to Individuals for LOSSES in 'TIGRIS,' and TRAVELLING EXPENSES to ENGLAND after that Event.

Additional Expenditure for the officers and men (from p. 72 of Parliamentary Papers).

ITEMS.				Amounts. £	s.	d.
Colonel F. R. Chesney. (No return.)						
To Lieut. H. B. Lynch, I.N., for losses in 'Tigris'				130	0	0
„ travelling expenses, &c., paid by Treasury				329	13	11
Lieut. R. B. Lynch, passage-money returned				50	0	0
To Dr. C. F. Staunton, R.A., for losses	£130	0	0			
„ additional travelling expenses	30	0	0			
„ six months' additional pay	68	12	6			
				228	12	6
„ travelling expenses home from Bagdad .				60	0	0
To Mr. A. A. Staunton, for losses	£130	0	0			
„ additional travelling expenses	30	0	0			
„ six months' additional pay .	68	12	6			
				228	12	6
„ travelling expenses home from Bagdad .				60	0	0
To Lieut. Eden, R.N., for losses .	£ 80	0	0			
„ additional travelling expenses	20	0	0			
„ two months' additional pay	8	6	8			
				108	6	8
(N.B.—£60 travelling money included in Lieut. Lynch's £329 13*s.* 11*d.*)						
To Mr. W. T. Thomson, for losses	£ 100	0	0			
„ additional travelling money	20	0	0			
„ two months' additional pay	12	0	0			
				132	0	0
Carried forward . . .				£1,327	5	7

APPX. II.

ADDITIONAL EXPENDITURE FOR PAYMENTS, &c.—*continued.*

	ITEMS.				Amounts.		
					£	s.	d.
	Brought forward . . .				1,327	5	7
Additional Expenditure for the officers and men (from p. 72 of Parliamentary Papers).	To Mr. W. T. Thomson, advanced at Anna for travelling expenses . .				60	0	0
	To Mr. A. Hector, for losses	£ 300	0	0			
	„ as a gratuity .	100	0	0			
					400	0	0
	To E. Lowrie, for losses . . .				11	9	4
	D. Suckau, „ . . .				4	11	0
	W. Benson, „ . . .				8	11	2
Through the Treasury.	To mother of Eussof Sader	£ 30	0	0			
	Hassan, a native .	2	10	0			
	Antonio, „ .	2	10	0			
	Halil, „ .	2	10	0			
	Mohammed, „ .	2	10	0			
	Everdice, „ .	2	10	0			
	Chacoa, „ .	2	10	0			
					45	0	0
	Mr. Werry, Consul of Aleppo, is to draw on the Treasury to cover these sums.	£	s.	d.			
	To the relatives of Mr. Strathers, engineer	39	8	0			
	„ Thomas Booth, seaman	4	10	0			
	„ Benjamin Gibson, „	4	10	0			
	„ George Liddel, „	4	10	0			
	„ Thomas Batty, „	4	10	0			
	„ John Hunter, „	4	10	0			
					61	18	0
	„ Sergeant Clark, R.A.	20	0	0			
	„ Gunner R. Turner, R.A.	8	8	0			
	„ Gunner Jas. Hay, R.A.	8	0	0			
					36	8	0
	„ Gunner James Moore, R.A .				9	0	0
	„ Gunner Thomas Jones, R.A. .				10	0	0
	„ Private A. M'Donald, R.S. & M.				9	0	0
	To Corporal Benjamin Fisher, R.S. & M. .				11	5	0
	Gunner William Gosling, R.A. . .				9	5	1
	Giacomo, seaman				3	0	0
	Mr. Hector's expenses in recovering property from the 'Tigris'				183	2	5½
	Expense of party living, &c. whilst detached on this service				41	13	7½
	Expenditure in consequence of the loss of the 'Tigris,' included in the general account .				2,231	9	3

September 1837. F. R. CHESNEY.

APPX. II.

Return of the Officers of the Euphrates Expedition showing all Casualties, &c. subsequent to Feb. 1, 1835 the day of Embarkation at Liverpool (from p. 66 of Parliamentary Papers).

Rank.	Names.	Date of joining the Expedition.	Remarks.
Colonel, R.A. .	F. R. Chesney	20th Aug. 1834	Embarked on board the 'Hugh Lindsay' at Basrah for Bombay, 14th Nov. 1836
Lieutenant, I. N.	H. B. Lynch .	3rd Nov. 1834	Left Expedition at Anna for England, 29th May, 1836.
Major, 43d L. I. .	J. B. B. Estcourt	26th Nov 1834	
Lieutenant, R. N.	R. F. Cleaveland	1st Jan. 1835	
Lieutenant, R. E.	H. T. Murphy	26th Nov 1834	Died at Basrah, 9th August, 1836.
Mate, R. N. .	Henry Eden .	16th Dec. 1834	Left Expedition at Anna for England, 29th May, 1836.
Lieutenant, R. A.	Robert Cockburn	1st Jan. 1835	Drowned in 'Tigris,' 21st May, 1836.
Mate, R. N. .	C. P. Charlewood	25th Oct. 1834	
Ditto . .	J. Fitzjames .	. . .	Left Expedition 30th October, 1836, in charge of the Indian Mails.
Asst.-Surgeon R.A.	C. F. Staunton	1st Jan. 1835	
Mr. . . .	A. A. Staunton	13th Nov 1834	Left the Expedition at Hillah for England, 11th June, 1836.
Mr. . . .	W. Ainsworth	26th Nov 1834	
Mr. . . .	W. T. Thomson	1st Oct. 1834	Left the Expedition at Anna for England, 29th May, 1836.
Mr. . . .	A. Hector .	27th Jan. 1835	Left at Bagdad in charge of the 'Euphrates' steamer.
Interpreter . .	C. Rassam .	At Malta, 20th Mar. 1835.	
Ditto . .	J. Bell . .	Ditto . .	Left at Aleppo.
Ditto . .	Seyd Ali . .	Sent from Bagdad by the Pacha.	
Ditto . .	Eussof Sader .	. . .	Drowned in 'Tigris,' 20th May, 1836.
Ditto . .	William Elliot	At Bir, 20th Sept. 1835.	Discharged at Anna, 20th May, 1836.

(Signed) J. B. BUCKNALL ESTCOURT,
September 1837. Major 43rd Light Infantry,
in command of the Euphrates Expedition.

APPX. II.

Return of the Men of the Euphrates Expedition showing all Casualties, &c. subsequent to Feb. 1, 1835 the day of Embarkation at Liverpool (from p. 67 of Parliamentary Papers).

—	Strength on Embarkation, 1st Feb., 1835	Reinforcements subsequent to leaving England					Reductions by Death, Discharge, or otherwise										
		At Malta, March, 1835	From 'Columbine,' Feb., 1836	From Beirut	From England, March, 1836	From Hon. E. I. Co.'s Cruisers at Bushire	Total	Dead	Drowned	Discharged at Liverpool	Discharged at Antioch	Discharged at Bushire	Discharged at Beirut	Discharged at Bagdad	Discharged at Malta	Sent on board 'Alban' Steamer at Cork, 15th Feb., 1835	Total	Total returning to England at the Breaking-up of the Expedition
Royal Artillery:																		
Non-commissioned Officers	3	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	2	1
Gunners . . .	13	1	—	—	—	—	1	4	4	—	—	—	—	—	1	—	9	5
Royal Sappers and Miners .																		
Non-commissioned Officers	3	—	4	—	—	—	4	2	—	—	—	—	—	—	—	1	3	4
Privates . . .	2	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	2	—
Seamen	16	2	6	2	—	10	20	2	6	1	2	8	2	11	1	—	33	3
Civil Artificers:																		
Engineers . .	2	—	—	—	2	—	2	1	1	2	—	—	—	—	—	—	4	—
Carpenters . .	2	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	2	—
Riveters . .	7	—	—	—	—	—	—	1	—	6	—	—	—	—	—	—	7	—
	48	3	10	2	2	10	27	11	13	11	2	8	2	11	2	2	62	13

(Signed) J. B. BUCKNALL ESTCOURT,
Major 43rd Light Infantry.

APPENDIX III.

JOURNEY FROM THE BAY OF THE ORONTES TO DAMASCUS (1835).

BY THE LATE MAJOR-GENERAL J. B. B. ESTCOURT.

April 3.—This day we reached the Bay of the Orontes. The 'Columbine,' brig-of-war, led the way, followed by the transport 'George Canning.' It was a fine sight, and full of interest. The scenery was beautiful and wild: the pointed mountains of Gebel Acra on our right, rising abruptly from the bay; a range of mountains, extending along the line of the coast, to the west, stretches inland to the east, overlooks Antioch, and is lost in the plain beyond. Gebel Mousa was on our left, forming the northern point of the bay: the mountains, of which it is the principal, fall back to the chain of Benglam. The Valley of Suedia, in which is the mouth of the Orontes, is hemmed in by these two mountainous ranges, and is thus cut off from the Plain of Antioch.

Arrival on the coast of Syria.

Beautiful scenery.

Valley of Suedia.

The Bay of the Orontes has been so little frequented by ships that there were no instructions to guide us: the water was extremely deep, the lead indicated no soundings, yet we were already near the shore. We stood close under Gebel Acra, but could not find a satisfactory berth; therefore, tacking about, we determined to try the other side, under Gebel Mousa, off the old port of Seleucia. The uncertainty of where to cast our anchor, the beautiful wild scenery which surrounded us, and the sight of the shore before us, where we were to land and begin our labours—all combined to make this a moment full of interest. Alarmed at our approach, two small vessels, that were at anchor, immediately got under weigh; one put to sea, and the other ran into the river. A flock of flamingoes, some forty in number, scared from their tranquillity, rose, displaying their beautiful plumage, and skimmed across the bay to the other side. We dropped our anchor for the night off the port of Seleucia, in 14 fathoms, and

Bay of the Orontes.

Flamingoes.

Come to an anchor.

APPX. III.

gave three cheers from both ships: our berth was not sheltered, but it had become too late to search for a better. Colonel Chesney and a party tried to land, but before we reached the shore it was dark. We could hear the waves breaking on the beach, and just see their white heads close before us, but could not find a place for landing: we therefore rowed back to the ships, to wait for day.

Natives bring provisions.

April 4.—In the morning two natives were brought off to us by one of our boats, which had landed. The object of their visit was to offer us assistance in anything we might want, and we accordingly employed them in getting us provisions. During the time that we remained at Suedia, one of them, who was the chief man of the neighbourhood, proved useful to us, but cheated us with national avidity. They were both Christians (Greeks), who are much despised by the Turks, and subjected to continual indignities and exactions. Such oppression has not failed to degrade their moral condition; they are cunning and rapacious.

They all cheat if they can.

Condition of the natives under the Turks.

After the visit of the strangers was over, we took them ashore. It was not easy to land, for on the bar at the mouth of the Orontes, the waves were breaking, which alarmed them very much. Our after-experience proved the entrance to the river to be very uncertain and dangerous. With a wind blowing into the bay, the sea breaks upon the bar and upon the whole shore, so as to render it impossible, at times, to approach with safety.

Breakers on the bar of the Orontes.

Valley of Suedia, extent of.

The Valley of Suedia may be about five miles along the sea-line, and runs back about four miles; right and left, as has been described, are the mountains connected with Gebel Mousa to the north, and Gebel Acra* to the south. The Orontes, issuing through a narrow pass, flows by a very winding course along the southern side. The soil is rich and well cultivated; it produces corn of every sort, and is thickly planted with mulberry-trees for the silkworms, which are reared in great numbers. The grapes, too, are very fine. Mr. Barker, formerly Consul-General for Great Britain in Egypt, has a house and large property here, to which he retires from Aleppo during the severe heats of summer. The village of

Its soil and productions.

* Acra means bald; the top of the mountain is pointed, and looks quite bald.

Suedia is scattered upon the side of the hills at the farther end of the valley: the houses are mostly of mud; the roofs are slightly sloping; they have projecting eaves, and are rather picturesque. The inhabitants are all Christians. Village of Suedia.

Under Gebel Mousa, just at the extremity of the bay, towards the north side, are the remains of the ancient city of Seleucia: there are still some walls in existence; bricks and pottery are scattered about, and in the face of the rock there are many tombs hollowed after the manner of those described at Petra. Ancient city of Seleucia. Tombs.

The old port is still quite distinct, and might be again used at no very great expense: it consisted of a large basin situated close under the rock, having an entrance through gates from the sea; the entrance is filled up, but the piers for the gates remain, also part of the mole, and the wall round the basin; water still runs in and out of it through the sluice-drain; the bottom is muddy, and overgrown with reeds and long flags. The old port.

Just above—but for what purpose has never yet been, I think, satisfactorily explained—is a long excavation through the hill; it communicates with a little hollow valley beyond, and either brought water to form a constant outward current, that the entrance to the port might be kept clear, or simply was a communication from one part of the town to the other, to avoid passing over the steep and high hill above. Looking round, you see the Valley of Suedia, a quiet and retired space, open to the refreshing breezes from the sea, and shut in from all the world besides—rich in its own productions, cultivated as well as wild, and highly favoured by its healthy climate. Hollow way. The Valley of Suedia.

Our first object was to explore the Orontes: its appearance at the mouth was not favourable to navigation: the bar seemed a serious impediment, yet not at all times, for we found a vessel of from 20 to 30 tons lying within; it was that which had run in through fear of us. We afterwards remarked that the bar is loose and shifting, nor did it seem that there would be much difficulty in constructing a pier, which should carry the waters of the river into the sea, so as to keep the entrance deep. The current runs at the rate of $3\frac{1}{2}$ knots an hour. The course, after the river comes into the plain, is exceedingly tortuous: just above, at the pass of the mountains, it rushes with violence over a rocky bed, and Exploration of the River Orontes. Bar at the mouth of the river. Project for keeping it clear. Course of the Orontes.

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could never there be navigated except by constructing locks to raise the level.

Examination of the road to Antioch and onwards.

April 5.—To-day Lieutenant Murphy, Dr. Staunton, and myself were sent by Colonel Chesney to Antioch to examine the country over which our road was to pass, and the bridges of Antioch and Djezzer Hadid; but the heavy rains of the morning and night had swelled the rivers into violent torrents, and obliged us to seek shelter in the house of Yusuph Saba, our visitor on board the ship. This was our first specimen of a house in the country: we were received with great hospitality, and shown into a room furnished round the walls with cushions to lean against and mattrasses to sit upon: a fire of charcoal was brought in a large metal chafing-dish—also pipes, sherbet, and a good supper. After all this luxury, however, came a night of torment, for we were not yet hardened to the attacks of the ravenous fleas, which seemed to have a greedy thirst for European blood. Next morning we set forward again: part of the road was stony, hilly, and bad; in fact, it was at best but a mere horse-track. We crossed the two Kara-Chai rivers, which dwindle into streams in dry weather, but swell again into torrents in a single night of rain. They come down from the mountains of Beilan, and run into the Orontes.

Yusuph Saba's house.

Ravenous fleas.

Kara-Chai rivers.

Antioch.

After a ride of about four hours we approached Antioch: it looked exceedingly beautiful—its situation, its minarehs, the purple rocky mountains above it, and all the country round. It is placed on the left bank of the Orontes, which runs rapidly past it, turning mills and large irrigating wheels as it flows: the town occupies all the space, to the foot of the heights behind: the ancient walls are not only in existence, but in excellent condition, though Ibrahim Pácha, in order to furnish materials for an extensive barrack, was, with relentless barbarity, in full operation of blowing them up: they are of hewn stone, and built with great exactness, having square towers at regular distances. Leaving the river on one side, they run back to the top of the mountain, along the ridge of it, and again descend to the river's bank, enclosing an oblong of about two miles, part of which is occupied by the town, and part by gardens.

The ancient walls.

George Dibbs.

Over the river is a stone bridge with a gatehouse; by it we entered the town preceded by George Dibbs, a hospi-

table old man, well known to every European traveller who has passed through Antioch. Though not Consul, he has acted the part of Government agent, has been styled Consul, and is proud to be considered the person of reference for all Europeans: in that capacity he has rendered kind and valuable service to many by receiving them into his house, and helping them on their journey. We knew nothing of George Dibbs; but our guides, the owners of our horses, sent one of their party forward to acquaint him, according to custom, of the approach of Europeans; in consequence, notice was soon brought that he would come out to meet us, and requesting that we should wait outside the town. But any parade about our entrance into Antioch seemed quite out of place: we were mounted on little thin starved ponies, rough and shaggy, with packsaddles, rope-halters, and loops of rope for stirrups, all in the worst condition: they had answered our purpose to bring us from Suedia to Antioch, but it was too absurd to make a parade of our arrival in such sorry style.

Character of George Dibbs.

Our poor horses and sorry equipment.

George Dibbs soon met us, though we did not wait for him; he was a great fat man on a white horse, folded in loose clothes, and looking exceedingly like an old woman. With him came his dragoman, having on his head the orthodox high fur cap; also Monsieur Dalgon, an old *militaire* of Napoleon, who had entered the service of the Pacha of Egypt, like many others, after the war, as instructor to one of the regiments. Preceded by these, who rode singly in regular order, we were conducted to George Dibbs's house, and there introduced to the divan by a young Pole, dressed in the Egyptian costume, who turned out to be an *emigré* from the land of his fathers, and of those unhappy people whom Englishmen often meet to remind them of the cruelty of Russia and the broken faith of their own Government. He was a gentleman of excellent address and attainments, and became afterwards a friend and companion of us all.

Reception at Antioch.

Arrive at Dibbs's house.

The hospitality and importance of George Dibbs, as well as the consideration to his guests, required that nothing should be wanting in sherbet, pipes, coffee, and so forth, nor that they should be served in any other than the most approved fashion. The ceremonies attending these matters are far from being unimportant to a Turk, nor are they by any

His hospitality.

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means disagreable to a European. Conversation was carried on in bad Italian, or through the Pole in French. We spoke of course of the Expedition, and expected to find that, as the Pacha (Mehemet Ali) had engaged to the British Government to lend us every assistance, all would be prepared to look favourably on us, and feel interested in our progress; but to our surprise we learnt from George Dibbs that the promise given by the Pacha had been withdrawn.

The Pacha withdraws his promised assistance.

His engagement was to assist the Expedition by all the means in his power; it had been entered into by formal diplomatic communications from the British Government with Mehemet Ali, through Colonel Campbell, the Consul-General in Egypt. The Pacha was to provide 'arabas' or waggons of the country, camels, and animals, and to make the road from Suedia to Aleppo, besides furnishing the people who might be required: and persons in authority, from the highest to the lowest, were to aid and assist. But intrigues from a quarter which looks with cupidity upon our possessions in the East, and would wish to thwart any project for rendering them more valuable, or adding security in them to us, had succeeded in working on the suspicions of the Pacha, and in creating alarm that our enterprise was not for the mere conveyance of letters and passengers between India and England; such an object alone could not, they argued, be of such great importance as to encourage all this expense and hazard.

Intrigues of other Powers.

Deceit of Eastern Governments.

There is so much deceit in the system of Eastern government, that the Pacha was easily led to believe there might be bad faith on the part of England. At all events, it was safer to stand still than to move—to allow nothing to be done than to have to undo by-and-by. These were reasons of great weight with an Eastern, and had they been considered so early as to discourage the British Government from the enterprise, might have been borne without complaint; but now it was too late. To allow the Expedition to be fitted out and to appear upon the coast, ready to begin to work, and then to shut the door against it, was an insult to England. The Mutsellim, or Governor of Antioch, had received orders not to permit us to land.

Orders to the Governor of Antioch.

Amongst other things, we had been directed by Colonel

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Djezzer Hadid.

Chesney to examine Djezzer Hadid, or the Bridge of Laon, over the Orontes, about two hours above Antioch. We therefore rode to it with our new friend the Pole. It turned out to be built of stone, with a gatehouse on the left bank. The arches were too low to admit of boats of any size passing through them, though they were larger than those of the bridge at Antioch.

Return to Antioch.

Returning to Antioch, a jackal followed us from the Gate of St. Paul for half a mile: it was dark, and on approaching close to the town we saw a beautiful illumination at the tops of the minarets, to celebrate the eve of the new year.

New year's day of the Mahommedans. Their customs, dress, &c.

April 8.—This was New Year's Day with the Mahommedans. As the First of January is with us, it is a day of congratulation and good wishes for the coming year: everyone dresses in his best clothes: the day is passed in paying and in receiving visits. The streets are alive with people passing and crossing, all in fresh, bright, gay clothes; the rich accompanied by a due proportion of servants—the pipe-bearer, secretary, grooms, and attendants, carrying sticks of silver with handsome large knobs, and, as a friend of mine excellently well described it to me, 'their bellies full of pistols.' At the visits the conversation consists of compliments, and wishes (expressed in various terms) for health, happiness, and prosperity. Sherbet, pipes, and coffee are served after the most approved fashion, and with the more attention from the servants that they receive, as a prescriptive right on that day, a present as the visitor leaves the house. During our visit to Ibrahim Pacha's chief secretary, he received a bundle of letters, which he opened and read whilst we were with him, a practice not the least uncivil amongst the Turks; on the contrary, they court the interruption, because the receipt of letters betokens business and importance. After duly reading his letters, the secretary announced that his Highness Ibrahim Pacha had left Cairo to return to Antioch, a piece of news which was carried without loss of time all over the town.

Visit to the Pacha's secretary.

Unfavourable report of the Orontes.

In the evening we were joined by some of our party, who had come up the banks of the Orontes to examine it; but they did not report favourably of it. In many places it rushes violently over a rocky bed, and in others it is crossed by dams for mills constructed at the sides. The scenery,

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however, is beautiful, through high impending rocks, and hills covered with trees; or through cultivated valleys, with vines, fruit-trees, and corn.

Return to Suedia.

On the following day we returned to Suedia. Colonel Chesney had learnt the prohibition of the Pacha, but, thinking it a shameful want of faith to the British Government, he determined to act upon the first engagement, to execute the directions he had received; to land, and to use every effort to get forward with the Expedition, unless compelled to desist by force. He had, in fact, already begun the disembarkation; everyone was busy in landing our stores as quickly as possible; many things were ashore, and we had already suffered a loss, which was likely to have been of the greatest consequence. A small keg of valuable materials for the engines (valves, screws, nuts, and suchlike) had fallen into the water—dropped, as it was being landed, close to the bank, but in deep water.

Colonel Chesney's determination to land the Expedition.

Loss of part of the engine in the Orontes.

Visit of the Governor of Antioch.

April 9.—The Governor of Antioch presented himself this morning at our little encampment, to visit Colonel Chesney, who received him on board the 'Columbine': a salute was fired for him as he stepped over the quarter-deck.

His object to prevent the disembarkation.

It soon appeared that his object was to prevent the disembarkation of the Expedition, which, however, had already made considerable progress. Much conversation took place, after which it was agreed that Colonel Chesney should give him a paper declaring himself responsible for the consequences of landing, but demanding formally from the governor the assistance promised, and ordered in the first place, by Mehemet Ali.

Determination of the Commander to proceed.

The impossibility of advancing beyond our encampment determined Colonel Chesney to send me to Damascus, in order to remonstrate strongly with Sheriff Pacha—who, in the absence of Ibrahim, was charged with the government of Syria—and to make a demand for a fulfilment of all the assistance agreed upon by Mehemet Ali. We possessed a copy in detail of the different points engaged for.

Set out with Dr. Staunton for Damascus.

I set off immediately after the visit of the Mutsellim, accompanied by Dr. Staunton, and took up my quarters at Antioch again with our hospitable old friend George Dibbs. An application was made for horses for our journey, and a cowass, who is a sort of gendarme, or armed servant of the

Government. Several cowasses are attached to people in authority, in number depending upon their rank or wealth. They lounge about in the yards and outer rooms, eat, drink, and are insolent: they inflict summary punishment upon all who attempt to interfere with their wants and wishes. A word and a blow is exactly their system; they swagger, and swell their master's dignity for the sake of their own. They are employed in extorting money, and in all the exactions of government, in which service they do not forget themselves.

Cowasses, their employment, uses, and abuses, &c.

We had great difficulty in procuring either horses or the cowass; for, after the order prohibiting the Expedition, the authorities were afraid to allow us even the accommodation usually accorded to travellers. After the delay of half a day we got off, and immediately began to creep up the mountain at the back of Antioch by a steep and stony track. This ascent, though the most severe, as rising from the level of the plain, was only the first of a succession of heights, till we had crossed the mountainous district connected with Gebel Acra and the range of Lebanon.

Difficulty in procuring animals.

Leave Antioch.

Ascend a succession of heights.

In about four hours we came to the village of Soria, where the cowass had had directions from George Dibbs to procure a lodging for the night. Soria is a Christian village; the houses, like those of Suedia, are of mud, but the roofs are not in the same picturesque style; they are flat. We rode up to a house, conducted by the cowass; no question was asked about the possibility of receiving us; it was a matter of course that what there was we could have, and whether we were welcome or otherwise seemed of no consequence: nor is it so at any time, either amongst the Turks in the towns, or the Arabs in the desert. The stranger rides to the Sheikh's house, whose duty it is to receive all travellers, lodge them, and feed them; he there dismounts, and not only depends upon being well treated, but frequently gives himself airs about the fare, and thinks it not unbecoming to treat his host with contempt, and abuse his best efforts to please.

Village of Soria.

Description of village.

Customary way of receiving strangers.

Most houses have one room set apart for strangers; in that of the Sheikh it is always so; and in the tent of the Arab a partition is carried across, to divide one portion from the other—one being open to anyone, and the other being the sanctum of the family. In this instance it was no great

Accommodation amongst the Arabs.

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matter to have such a room reserved as that into which we were shown; it was up a few broken steps, through a low door, into a dark room without a window—the walls rudely built of mud without whitewash. A few holes served the purpose of shelves, a few sticks thrust into the mud did for pegs; the floor was uneven, and also of mud. The first operation was to clean out the place (for it was very dirty), to spread our rugs (for everyone travels with his own), and to deposit our arms and baggage. We then strolled about till supper was ready: this was spread upon a round flat mat, about three feet in diameter, to which we sat crosslegged: as yet we were at a loss without knives and forks, for we had not learnt the method of using bread, which, being in flat cakes, is made to help the fingers in drawing a mouthful to the side of the dish, from whence it is safely carried to the mouth; this is managed with some dexterity, and is not then so very disagreeable. After supper, pipes, and coffee, we laid ourselves on our rugs and slept.

Customs of the people, &c.

Method of eating.

Next morning (April 11) we arose and continued our journey; the road was hilly, and the country uninteresting. In nine hours, after traversing a plain, we arrived at the edge of a steep hill, overlooking Djezzer Schogger, which we saw directly below us; the descent was by a zigzag paved road cut into broad and regular steps. A long line of camels was climbing up at a slow and stately pace, adding very much to the picturesque effect. The town is on the left bank of the Orontes, over which there is a stone bridge; the river is rapid, clear, and full; on the other side a valley spreads itself as far as the eye can reach, rich with the finest pasture. The town we found poor and dilapidated, having suffered lately from an attack of the mountaineers, the Druses, whose submission to the Egyptian Government had not at that time been effected. Ruined as it looked from the hill, it was more wretched still upon a nearer approach; most of the houses were pulled down, nor did it seem possible to find one that would serve us for a lodging; but after passing through the rubbish for a short distance, our cowass brought us to the house of a man whom he directed to lodge and feed us for the night. This man had no fancy for the tax, and did not pretend to esteem it an honour; but his growlings were

Description of the country.

Town of Djezzer Schogger.

Difficulty in getting bad lodgings.

silenced by the cowass, who would have exacted hospitality with a stick, rather than forego any attention or good fare he thought the man could afford—or rather that he thought us, including himself, entitled to.

Cross the river by a bridge.

April 12.—This morning we crossed the river by the bridge, and entered the valley. We rode close under a line of hills on our left hand, having the full breadth of the valley on our right, through the middle of which ran the Orontes, and beyond were the beautiful mountains of Anti-Libanus. Before us were picketed the artillery horses of the Syrian army; they reached as far as we could see: in a ride of five hours we had not entirely passed them. Every horse was picketed by a fore and a hind leg, leaving his head at liberty; this is the constant practice all over Syria, and I believe it to be a very secure method, especially when at pasture. The animals looked exceedingly well, neighing and arching their necks, in the animated style of the Arab; they were fine specimens of the breed, for the Pacha gives larger prices for horses for his army than are commonly given in the country; even three purses, or 3,000 piastres (about 30*l.* of our money), is not an unusual price; whereas a purse and a half or two purses (from 15*l.* to 20*l.*) is the cost of a good horse, though some mares fetch even as much as thirty purses (300*l.*);* but then they must have an undoubted pedigree from one of the five mares of Mahomet, possess all the marks of excellence, speed, and good luck, have been taught to wheel and halt when at full gallop, have a broad chest, a fine spirit, a handsome carriage, and a gentle temper. The Arabs know nothing of the anatomy of a horse, but they have methods of measurement which no doubt afford them, though they do not know why, very sure guides for ascertaining good proportions; thus, from exactly between the hip-bones on the back measured over the tail, and down to the ground under the heels, should be equal to the distance from the same point between the hip-bones over the neck and down to the nose.

Encampment of Syrian army.

Mode of picketing their horses.

30*l.* the usual price of a horse for the Pacha.

Arab knowledge of horses.

Upon leaving Djezzer Schogger, we had meant to have breakfasted at any encampment of Turcomans we might chance to see; and as the morning advanced, and our appe-

Leave Djezzer Schogger.

* This exorbitant price is asked to prevent the possibility of a sale, as an Arab is considered to be an inheritance in the tribe.

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tites grew more importunate, we anxiously looked about for the black tents of those hospitable people, but in vain. At length we were passing near a high mound, which stood like one of the tumuli on Salisbury Plain, but very much larger; we saw on the top tents larger and of more importance than those in the plain, and several persons collected about them; a soldier from the party coming to meet us, saluted and invited us in the name of the General to rest in his tent, and to breakfast with him. We were too hungry and too curious of the manners of the country to refuse: we therefore followed the soldier, and entering a large round tent, lined with yellow, we found ourselves before the General, who sat with a full view of all the horses belonging to his command: his baggage was piled neatly behind him; carpets and cushions were spread on each side of him; and his servants stood with their hands before them, awaiting his orders. As we approached, he arose, and invited us to sit near him; pipes, sherbet, and coffee were introduced; he asked many questions about the Expedition, of which he had heard, and was exceedingly affable and polite. He was a thin gentlemanlike man, of good manners, dressed in the plain costume of the Egyptians, which consists of a jacket, waistcoat, large trousers, and a silk white-and-striped sash. Like the upper ranks in the service, he wore black, with the decoration of his grade on his left breast: it consisted of a crescent set in diamonds. The Egyptians differ from the Turks in the taste for bright colours. The most correct colour is black: Ibrahim Pacha either wears black or blue, and the superior officers follow the example. There is no particular uniform; provided the dress is of the right cut, it matters not of what colour it may be.

Mound like the tumuli in Salisbury Plain.

Invitation to the General's tent.

Entertainment with the Syrian general.

After talking and smoking for some time, a basin, with a small stand in the middle of it for soap, was brought round to each of us in turn, but to our host first; an embroidered towel hung over the shoulders of the servant, who poured water over our fingers from a vessel which he carried in his right hand. After this preparation a small stool was placed before us, and upon that a large metal salver; bread was laid round it, and we were invited to seat ourselves before it. Each dish was brought singly and placed in the middle: we were expected to partake of each in its turn: our host gave

Ceremony before meals.

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the signal when to remove one and bring the next. He apologised for the scantiness of the fare by saying he was living in camp, but there were notwithstanding five or six dishes, all very good, and well cooked: the last, according to an invariable rule, was a plain pilau, which being discussed, we fell back to our places, washed our hands, in the same manner as before, smoked, and sipped our thimbleful of coffee. After more conversation, we thanked the General for his hospitality and rode on, very much pleased to have seen so good a specimen of life as it is conducted amongst the upper ranks.

Native dishes.

Take leave of the General.

We soon passed beyond the long-stretching encampment of the artillery; but the same plain continued, with the same abundance of herbage, a beautiful tract for feeding the horses of the cavalry, which for the three spring months of vegetation receive no rations. We observed to-day several of the mounds, on the top of one of which the General had fixed his tent: they seemed placed at regular intervals of about three miles, and between each was a stone, about five feet high, on the line of the road: the mounds were circular, and might be about forty feet high: the stones apparently were to mark the distances. As we approached Kalat Medyk, we found that we were riding on a regular *chaussée*; for here it was sufficiently perfect to indicate exactly that it was one of the roads in the ancient days of the country, when Kalat Medyk was Apamea, and flourished with handsome buildings, pathways, and amphitheatres.

Mounds at intervals of three miles.

The road to Kalat Medyk, a poor miserable village.

Kalat Medyk now is a miserable village, but has an imposing appearance: it is situated on the top of a hill, overlooking the valley of the Orontes, and surrounded by a good wall of cut-stone: the approach is by a steep paved ascent, cut diagonally up the hill, and entered by a gatehouse. Outside the walls, which probably enclosed the castle, as it is called to this day ('kalat' meaning castle), we found remains in cut-stone of a place of considerable size, situated on the hill, but not so elevated as the castle. We could trace the shape of some of the buildings by the foundations; some were even more perfect, especially the entrance, as it seemed, to an amphitheatre, of which the size and form were quite distinct.

Situation of Kalat Medyk.

Description of the village.

Remains of cut-stone.

Amphitheatre.

Our evening spent in rambling about Kalat Medyk was

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interesting and pleasant, but our night was miserable: our room was as bad as it well could be: all the poor diseased creatures of the village came for help to my companion the Hakim (as they called Dr. Staunton), who dispensed a little medicine with a great deal of good advice, not to smoke nor eat greasy things, advice which they would not follow. At length we were obliged to beg them to leave us, that we might rest, and rise early the next morning; but sleep proved out of the question; the most violent attack of fleas utterly deprived us of even one moment's rest, till, unable to bear it any longer, we jumped up, mounted our horses, and rode away. In the course of the day we passed under a rock upon which were the ruins of another castle, Kalat Schogger: it was a narrow space to build on: the walls were still in existence, but dilapidated: a gatehouse was standing, and a few poor people lived within the enclosure.

Violent attack of fleas.

Kalat Schogger.

Town of Hamah.

In the evening we reached Hamah. It is a large town of small houses; and is chiefly remarkable, nowadays, for the size of the waterwheels, which are turned by a little river, and raise water to the required level for irrigating the gardens, and for supplying the houses. They are furnished, after the oldest fashion, with small pitchers attached to the outer circle: these are filled as they pass through the water, and as the wheel is forced round by the current they rise, till they discharge their contents into a trough at the top: sometimes (as is to be seen on the Euphrates), the stream acting on the wheel alone is not strong enough to carry up the full pitchers, in which case fans made of reeds are attached to the radii; they project at the side, and, being pressed upon by the current, help to drive the wheel. In the neighbourhood of Hamah there is a good deal of cultivation, but no trees except fruit-trees: the soil seemed rich, but rather stony.

Water-wheels on the river.

Cultivation, fruit-trees only.

We were lodged with a hospitable kind Christian, to whom we brought a letter from George Dibbs of Antioch. Nothing could exceed the attention of our host; indeed it was more than was quite agreeable, for we were not yet broken into Eastern manners, and found the incessant salutations irksome and inconvenient.

A kind host.

Arrival at Homs.

April 14.—Leaving Hamah, we reached Homs in one day, a large but deserted town: some silk is manufactured here,

but there seemed neither business nor pleasure in the streets. Just outside the walls is the ground where Ibrahim Pacha beat the Turks in the last war.

From Homs we had the usual difficulty in getting away; constant promises from the Mutsellim that horses should be provided, but none forthcoming; till we became angry and went ourselves to him, to enquire the reason of our detention. As is invariably the case amongst these people, we found him full of the most polite duplicity; he expressed his deep regret that we should have been kept, but wished us not to hurry away from Homs; the journey to Damascus, he said, was across the desert for four days, and we ought to rest before undertaking it. That sort of language, however, only made us more angry; we insisted that we must go, till at length orders were given in our presence for the horses we wanted. But then we had to combat against taking a guard; the road was across so wild a country that the Mutsellim could not answer for our safety without a guard: we declined it, however, until he assured us it was as much as his head was worth, if any misfortune should happen to us by the way. The case was then changed: if it were to satisfy him we could have no objection, but the charge was not to fall on us, a condition which was not quite within his meaning. All being agreed to, we left him: the horses came the following day, but late; a small guard on horseback was in attendance, and we set forward.

The Mutsellim of Homs.

He provides a guard for us.

The first night was spent at the village of Shunsin; it is enclosed within a wall of defence, having one gateway: such is the practice in almost all the towns and villages bordering on the desert. The houses were wretched, and the place itself hardly more than a khan or hostelry. The entrance to our chamber was by creeping through a small low door, and its size within was about eight feet square, irregularly built, and dirty. A little bread was got for us, and we went to sleep, fortunately with better success than at Kalat Medyk. The guard had been, as was suspected, an excuse to extort money: it consisted of four men on horseback as far as Shunsin, and an attempt was made upon us there to induce us to undertake the expense of paying them; but finding that we were determined, the four dwindled down to two, having first compelled the Sheikh of the village to take the place

Village of Shunsin.

Our guard.

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of the deserters, with a party on foot. By-and-by these were reduced, till we went into Damascus with only one horseman, a most impudent fellow, who, with the muleteer, had impeded our journey provokingly all the way. A complaint, however, to the Governor of Damascus, through Mr. Farren, the Consul-General, gained for both a bastinado, which would have been followed by imprisonment, had we not begged for their release; when, to my great surprise, the janissary, with all the impudence in the world, presented himself at our lodging to ask for a present for having served us well.

Our janissary's imprudence.

The road from Homs to Damascus is, as the Mutsellim had told us, over a desert; it passes two or three villages, enclosed within a wall for protection. By degrees the desert becomes partially cultivated, till you descend into the valley, in which is Taifia, a better sort of village, in the midst of corn-lands and gardens. From Taifia we ascended the last range of mountains before we caught sight of the broad valley of Damascus.

Village of Taifia.

It was a beautiful prospect: rich, well-cultivated, abounding in fruit-trees and gardens; open to the desert to the south-east, but enclosed on all other sides by high steep hills, which again are overtopped by the snow-capped Libanus, and Mount Hermon in the distance.

Valley of Damascus.

Damascus rose amongst the trees, looking white, and gay, and elegant. Not many years ago a Christian could scarcely dare to enter the city; even later none but a Mussulman could ride through the streets on horseback; but since the government of the Pacha of Egypt all such bigotry has ceased. His encouragement and protection of Europeans has entirely put an end to the indignities to which they were formerly exposed. A European can now not only pass safely through every part of Syria, but he will also meet with consideration, even in his own costume. Most people who travel in the country adopt that of the Egyptians; yet, except for comfort's sake, it is not necessary.

Arrival at Damascus.

After passing through very pretty-looking gardens, we entered Damascus by a gatehouse, where there was a guard of soldiers, and so along several of the bazaars, which are celebrated for their extent. They are large covered passages,

Description of the city.

with an uninterrupted line of small shops on either side. There is a raised step about five feet wide and two feet high, where the people sit, smoke, and talk. The shop behind is a large cupboard, furnished with shelves. The owner sits crosslegged in it, and spreads some of his wares upon the raised seat before him to tempt the passers-by. The shops.

The men spend the chief portion of their time in the bazaars —some for business, but many more for idleness. A crowd is always passing and repassing. Coffee and sherbet, pipes and nargilehs, are supplied from a small recess at the end of each bazaar, where there is an establishment for the necessary implements, and from thence some one is constantly employed in running about with coffee or lighted charcoal for those who are seated. The bazaars.

To be a shopkeeper is a great ambition. Having once acquired sufficient to establish a shop, the title of '*Hawajji*,' or gentleman, is given, and proportionate respect is shown. Shopkeepers.

Damascus is termed amongst the Syrians a very 'kaif' or pleasure-making place. Amongst the gardens around are places of public resort, where parties of women assemble for air and amusement. They sit wrapped in their white sheets, which cover them completely; on their feet they wear very large awkward yellow boots, so that all delicacy of shape is entirely hidden. Costume of the women.

Without the walls there are *cafés*, built over the clear small rivers which flow beneath. They are delightfully cool quiet places during the heats of summer, and are usually crowded with people. The *cafés*.

Close to Damascus, upon the ascent of the mountain, is a suburb called Salahia, where the more opulent have summer residences. The air is there fresh and healthful; a supply of water flows through it in its course to the lower town, and by means of conduits is carried to the different houses for the tanks and fountains, in which there is great luxury in the gardens and even in the chambers. Suburb of Salahia.

Damascus has still 'the street which is called Straight;' * there is a cellar, now fitted up as a Christian chapel, which is pointed out as the house of Ananias, and a spot is shown Tradition in the East.

* Acts ix. 11.

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wherein Saul is said to have been lowered down in a basket over the walls. I did not hear why that spot is preferred for the scene described—what authority there is for saying that is the spot; but tradition is, in the East, the usual means of recording the history of particular events: a story once told is rarely lost, and though it may lose something of its original truth, yet its foundation may be depended upon. In this case it was interesting to have a spot shown as the scene of the escape of St. Paul after his miraculous conversion, and whether it be the place or not, when I saw it I had no doubt of the fact. Indeed, to enjoy a journey through the Holy Land and Syria, you must not doubt, but believe, at least for the time.

Our business at Damascus was to see Sheriff Pacha, but he was absent upon a visit to the neighbourhood of Jerusalem. However, Boghaz Bey was there, and Mr. Farren, the Consul-General, was fully assured that we might depend upon the answer of Boghaz Bey as upon that of Sheriff Pacha himself; for he was much trusted by the Egyptian Government, and was the chief counsellor of the Pacha. We accordingly paid him a visit with Mr. Farren; but could get nothing from him, except an assurance of goodwill, and that everything we could possibly desire should be immediately given, upon an order from Egypt to that effect. This was very unsatisfactory, and we determined to return to Suedia.

Interview with Boghaz Bey.

There was again some difficulty in procuring horses, because the government was seizing men and horses for the military service; so that the poor people were afraid to come into the place, lest they should be caught at the gates, and not allowed to return home: indeed, I doubt if we should have got animals at all, had not Mr. Farren sent out his cowasses to seize any they could find. The number we wanted having been obtained in this way, they were locked up for the night in Mr. Farren's house, that we might be sure of having them in the morning. It was an arbitrary proceeding; and under a government of good faith would have been unbearable—indeed, it would have been unnecessary. The men in the end were not discontented with being employed by us, for they were paid what was due, and the service was not disagreeable to them; but they had feared

System of compulsory service.

Sketched by Capt.n Chesney, R.A. in 1830 — H. Warren. lith.

Day & Haghe Lith.rs to the Queen.

BAALBEC FROM THE QUARRY

lest, being within the walls of Damascus, they might, though hired by us, be treacherously seized for soldiers.

Leave Damascus for Tripoli.

Having heard that Ibrahim Pacha was at Tripoli, on his way from Egypt to Antioch, we determined to go there, to try what could be gained from him. The road we took was through Baalbek. Upon leaving Damascus we ascended the mountain above Salahia, from the top of which we had a splendid view over Damascus and the whole valley in which it is situated. The first village where we halted was Zebdani, a pretty picturesque place. The next day we crossed Anti-Libanus, and descended to Baalbek: the road was mountainous and difficult. Towards the close of our ride, we espied some columns and ruined buildings in the valley just before us, and others on the top of a hill to our left: they did not seem extensive, but were plainly ruins of better buildings than are now to be seen in the country, and we accordingly rode up to examine them, when upon reaching the spot we saw the magnificent ruins of Baalbek just below us; the line of Anti-Libanus on the right; the plain of Cœlo-Syria before us, bounded on the opposite side by the grand chain of the Great Libanus.

Zebdani.

Ruins of Baalbek.

Baalbek viewed from this spot looked magnificent, and to me surprising in extent and grandeur. The present inhabitants are few; it is but a village; but the remains of the old buildings of different dates still exist, and the Temple of the Sun stands forth, grand in the extreme. The walls and towers of the city are in parts standing, and the watercourses are there, and still furnish an abundant supply for the place. But the Temple of the Sun absorbs every interest: it stands raised upon an elevation, which is entirely enclosed by walls: one portion of that space is an oblong building with a colonnade round it; the window-cases, architraves, and doorway are ornamented with beautifully-cut patterns, ears of corn, grapes, and many other devices, in excellent taste and perfect workmanship; the pillars of the colonnade are Corinthian, and the entablature is divided into compartments, each different in pattern, and of the choicest sculpturing. Reaching over the door are two figures of Fame, and on the keystone is an eagle with the thunderbolts of Jupiter in his talons: this stone is of immense size, and has fallen from its

Temple of the Sun.

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place, but hangs caught halfway by the greater breadth of its upper portion.

Besides this beautiful temple, which seems more especially to have been dedicated to the Sun, are also various other chambers and enclosures of considerable size, prepared with niches for the reception of busts and statues—raised places for sacrifice, perhaps, and a sunken place, which probably was a basin for water; but the most conspicuous objects, whether seen from a distance or from near, are six beautiful columns, standing alone—the sole remains of the building to which they belonged, and with a highly ornamental architrave resting upon their capitals. The size of the stones of which the whole building is constructed is wonderful. You see an immense mass lying on the ground, and upon examination you detect a portion of ornament, so large and in such relief that you can scarcely believe it to match the light elegant decoration which surmounts the still-standing pillar, and which in its place looks so delicate and in such just proportion. The material is a fine-grained sandstone, much resembling in colour the Bath-stone, but considerably finer: it is more like a stone which is to be found in some of the old churches in England, and which, I believe, is said to have been brought from Normandy. Those who have been in Portugal may have seen the same description of stone at Batalha. The quarries from whence the stone of Baalbek was cut, are within a mile and a half of the place: there is still to be seen an immense block cut and prepared ready to be carried away.

Columnar remains.

Quarries of Baalbek.

Our time would not allow us to remain longer at Baalbek; we therefore set off for Tripoli, intending to go by the Cedars of Lebanon. To ascertain the road, we consulted the 'Modern Traveller,' from which we learnt that we must pass through Anete, cross over the chain of Libanus, and so get to the Cedars; but upon enquiring for them, no one could be found who knew anything of Anete or the Cedars, till a man came forward and declared he was well acquainted with the 'Sedgar Kebir,' or the 'Great Trees.' This was not quite a satisfactory account of them; but it was the nearest approach to a description of them that we could get, and therefore determined us to engage him as our guide.

Cedars of Lebanon.

Our road was for two hours across the fertile Plain of

Cœlo-Syria, to Dur-el-Alkmar, at the foot of the hills under Libanus. After ascending and descending, we reached a spot, where were five large ash-trees and a subterranean chapel, which our guide declared to be the birthplace of the Virgin Mary: the trees, he said, were the Great Trees; he knew of none others, nor did he know of Anete or Bsherrai. We seemed to have left all population behind; there was no one to assist or to direct us. It had become very hot, and we were tired and thirsty; however, there was a pond not far off, to which we rode for water. Our animals had felt the heat as well as ourselves, and pressed forward to drink. Dr. Staunton's horse rushed on with such impetuosity that he fell forwards into the deep water, for within two feet of the edge the sides were perpendicular. After swimming round and round for some time, it contrived to scramble out, and, except a wetting for both the rider and the horse, no damage was done.

Subterranean chapel.

Whilst this was going on, a man came up, from whom we learnt that the Cedars were on the other side of the mountains—that he knew the way, and would lead us there. He proposed that we should sleep at Anete, but that we should take food with us, for nothing was to be had at Anete. Where it was to come from we could not guess; there seemed to be no one near; but he soon procured for us a little flour, some salt, and a small pail of 'leben' or sour milk. With these we set forwards, following our guide; but in a short time the pail became inconvenient to carry, and it was agreed to drink the 'leben' at once. I pressed our guide to partake, but he refused; till, supposing that I was not satisfied, he took a mouthful, and showed me he had done so, to convince me he might be trusted—that having eaten with us he would not deceive us. After wandering uphill and downhill through woods of dwarf oak, we came to the foot of the mountain, where, our guide said, was Anete, though scarce a vestige of the village could be seen. Here we were to pass the night, and accordingly deposited our baggage and arms against a large detached piece of rock, where we made a fire. Our guide made dough, kneaded it upon a stone, and flattened it out into large cakes, which he placed upon the hot wood-ashes, covering them over with more. In due time they were

A guide.

Anete.

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baked, and served us for supper; we then made up the fire, placed our arms close alongside us, and laid ourselves down to sleep, for which our long journey and scanty fare had prepared us. The next morning we rose before daybreak to begin the ascent of the mountain. It was still early in the year for crossing—no one had yet been known to pass; but our guide's plan had been to sleep just below the line of snow, so that in the morning we might traverse the mountain before the heat of the sun had thawed the surface.

Difficult ascent of Mount Lebanon.

The ascent proved more difficult than he had expected; there were no marks to guide us, no path, nor any track; it was extremely steep, and we were not early enough to reap the benefit of our guide's plan; the mules sank into the snow, and slipped and struggled; the muleteers were loud in their entreaties to us to give it up; even our guide at length said it was useless; the animals could not cross. Dr. Staunton, however, was still for persevering, though he was himself very much exhausted; and at length we reached the summit.

Reach the summit.

From thence was to be seen the sea in the direction of Tripoli, and a wide extent of country, comprising mountain, valley, and plain; below us, looking black upon the snow, were the far-famed Cedars, a small patch upon the side of the mountain.

All our troubles were now supposed to be at an end; the descent, we thought, must be easy; but the sun had risen by this time high in the heavens, and melted the snow upon the western as well as the eastern side of the mountain; every step we took we sank through its full depth. The mules,

The descent.

with their small feet, found it more difficult than ourselves; they struggled and floundered, till the muleteers again entreated us, even now, to turn back and give it up. That, of course, was out of the question: we threw the loads off the mules to relieve them, and let them slide upon the snow to the bottom. One mule after another was then helped down —sometimes by lifting one leg, then another, and sometimes almost the animal itself. All got to the bottom except one timid mule, the last of the string. The owner, a Christian, had been in tears some time, for he supposed that his animal could not be extricated from its difficulties: it was, he said, his sole dependence for providing a marriage-portion for his

sister: but it struck me, that if we could but upset the animal, she might slide to the bottom as the baggage had already done. I therefore made a sign to the other muleteer—who was a Turk, and not so ready to break his heart as the Christian—to give me his help; and whilst the creature was struggling and off its balance, we turned it on its side, and let it go. Nothing could have answered better: the poor Christian was at first in despair, but the Turk was delighted; away slid the mule, and reached the bottom safely, where it got up and walked off to its companions. The difficulties being at an end, the loads were soon replaced upon the mules' backs, and we continued our journey by a less steep track.

Presently our guide, directing the muleteers to the Sheikh's house at Bsherrai, led Dr. Staunton and myself straight to the Cedars, which we saw before us. We soon reached them. Our guide prostrated himself at the foot of the largest, where a rude altar of stones had been raised, and where Mass is said on the day of the Transfiguration; he then told us he had fled from his village to avoid the conscription, and now lived a wandering life upon the mountains; so that he could go with us no farther. The little present of money we gave him for his services pleased him: he bade us God-speed, and left us to recross the mountains.

Our guide leaves us.

We were now under the Cedars, and I must confess myself to have been disappointed. There are five very large trees, but their size arises chiefly from the swelling of the trunk just where the branches shoot, which is from low down. They have, indeed, a very aged look; the branches are very large, and their general appearance is ragged. Of the rest, a few more seem old and are large, though not so large as the five; the remainder are young and small. Staunton read many of the Psalms which speak of the cedars or of Mount Lebanon, and so we passed our Sunday.

Description of the Cedars.

After a couple of hours spent in this celebrated spot, we went to Bsherrai. The bells were ringing, for all this country is Christian, and the people were out, it being Sunday; and our adventure having been told by the muleteers, had raised a curiosity to see us. The Sheikh was a good old man, who treated us with great hospitality. Bsherrai is famous for its tobacco.

The Sheikh

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The evening was spent in full conclave. The people sat round the room, after the usual custom, curious to see us, and to hear the news. Dr. Staunton was soon found out to be a physician. Diseases, curable and incurable, were brought to him: to some he gave medicine, to others he would give only an answer quite unsatisfactory, and not understood; for he was a Hakim, a Hakim Frangi, and must have remedies for all complaints.

Medical consultations.

The next morning we got away. The road lay through the village of Eden, along the side of a deep valley: till, coming to the end of that part of the mountain, we had a full view of the beautiful and fertile tract between Libanus and the coast. Descending into the plain, we passed through gardens and groves of orange and mulberry-trees, till we reached Tripoli, called in the country 'Little Damascus,' from its reputed neatness and luxuriant environs.

Village of Eden.

April 28.—To-day we paid a visit to Ibrahim Pacha, who was staying at the Port of Tripoli, called 'Marina,' which is about half an hour distant from the town. It was not with any hope of inducing the Pacha to lend the promised aid to the Expedition that we paid the visit; for we learnt on arrival at Tripoli that Colonel Chesney had been there from Suedia in the 'Columbine,' and could only obtain the ever-ready answer that everything should be done, as soon as orders to that effect should be given by Mehemet Ali; but for himself, Ibrahim declared, he was without authority—that he was a mere soldier, and would only follow instructions, though his personal feelings were much inclined to the Expedition. All this meant nothing but a refusal to move a jot.

Arrival at Tripoli.

We were conducted, upon our arrival at the Marina, to Ibrahim's medical officer, a German of the name of Choehi, a clever man. With him we found Ibrahim's chief secretary, or rather confidential attendant, who had been educated for seven years in England. He had been sent, like many other Egyptians, by Mehemet Ali to Europe for education; he had passed some time at Cambridge, and understood English very well. By him we were conducted to the Pacha, who came into the divan as we entered by another door, thus avoiding the doubt about rising or not rising to receive us. His appearance was not prepossessing; he

Interview with Ibrahim Pacha.

was a fat ungainly man, with a scanty grey beard and a small quick eye: he was dressed in the plain military costume of the Egyptians, but without a sash. Ibrahim, who is really a thorough-soldier, assumes a carelessness of dress and manner, as becoming great talent. Pipes are condemned by him as promoting idleness; he rarely smokes them himself, and never offers them to his guests: indeed, he prohibits pipes even to his officers, an order not much obeyed. Notwithstanding these reformations, however, he by his own example, and by precept too, encourages the vice of drunkenness; so that the valuable Mussulman habit of temperance is not retained in his army, though so thoroughly engrained in the habits of the people. Intoxication is not punished among the soldiers, and those who indulge in it do so to excess.

Ibrahim's views regarding the Expedition

Having seated ourselves, the Pacha with his legs stretched out, we talked generally of the Expedition. Ibrahim said he had spoken to Colonel Chesney only upon those points which were the cause of his visit, and that he wanted to know a little of how we meant to proceed—to cross the country with our heavy materials, to build our boats of iron, and to descend the river, which he believed to be, in parts, too shallow. We answered the difficulties he suggested as well as we could, though I believe he remained convinced that they would prove not so readily surmountable. He could not comprehend how an iron boat should swim, nor how the draught of water should be so trifling with so long and so large a vessel. When we told him that we had a few presents for the Arabs, he laughed, and recommended us by no means to give them any—that there would be no end to their rapacity. At the conclusion of our interview, he invited us to take our passage with him to Suedia in his steam-frigate, a large English-built vessel lying in the offing.

Take boat for Tripoli.

As we expected, nothing was gained by this visit, and we had to return to the Orontes without the removal of a single difficulty. We took a boat at Tripoli, for there were no horses to be had, and we could not wait for the Pacha. The sails were ragged, and the gear mere packthread. We spent two nights and two days uncomfortably enough; but we had still something to compensate for it in the magnificent view of the coast and the range of Lebanon, of which the outline was

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beautiful, and the colour deep blue and very brilliant. We touched at Sotosa for provisions; but so wretched a little place was it, that a few eggs, onions, and bread was all we could procure.

Sotosa.

Latakia.

At the end of the second day we got to Latakia, and were received with great hospitality by the family of the Consul, who is a native; his brother was Consul for the United States; both were handsome young men, very kind and obliging. Their mother was a nice old lady, who took her place, after the European fashion, at the head of her own table; and a pretty daughter made one of the party.

Native Consuls.

Latakia is pretty: it has a harbour within a mole for vessels, and has a large share of the Aleppo trade.

Rejoin the Expedition

From Latakia we took horses, and after riding for two days through a mountainous woody country, at the back of Gebel Akra, we descended to the Orontes, crossed it by a ferry, and rejoined the Expedition where we had left it.

APPENDIX IV.

A JOURNEY FROM SUEDIA TO RESCHID PACHA'S CAMP NEAR DIYARBEKR (1835).

BY THE LATE MAJOR-GENERAL J. B. B. ESTCOURT.

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ALL Colonel Chesney's attempts to procure camels, for the transport of our stores to the banks of the Euphrates, had entirely failed. Ibrahim Pacha was not to be moved, and his orders to the different officers were strictly obeyed. Some camels, which had been hired, were on their way to Suedia; but as soon as it was known at Aleppo, the chief officer of the district, Ishmael Bey, sent directly to stop them, at their peril. Seeing, therefore, that our detention was likely to be complete, if he depended only upon the Egyptian Government, Colonel Chesney determined to try what aid could be obtained from that of the Sultan, which was considered more friendly to us than that of the Viceroy of Egypt.

Intrigues against the Expedition

All sorts of intrigues were employed to defeat the Expedition; but the Sultan's Government was less alarmed, and therefore less inclined to impede us, than that of Mehemet Ali. The firman of the Sultan was sufficiently strong to warrant the different officers in giving every aid the country could afford. It was addressed to every description of authority; and though the independent position of Mehemet Ali enabled him to take his own course, yet Colonel Chesney fully relied upon all those who immediately belonged to the Sultan's Government to render assistance. Accordingly, I set off on May 8, in the evening, on a mission to Reschid Pacha, accompanied by Lieutenant Cockburn and Mr. Staunton, our surgeon, meaning to go by Khillis; but no horses could be procured in Antioch for Khillis—we therefore were forced into the other road by Aleppo.

Djezzer Hadid.

Having reached Djezzer Hadid at 9 P.M., we found that the caravan of mules, to which in fact our animals belonged,

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A night halt.

was encamped on the plain hard by: we also made a halt there, and spread our cloaks for the night, not quite to the satisfaction of one of my companions, who had not yet learnt how comfortably a night might be passed with no other protection than a cloak. A glimmering light attracted our notice, for we were hungry; and a man being despatched to try what could be found, returned after some time with some flat cakes he had waited to get made, a little milk, and some 'leben'—a description of sour milk, exceedingly pleasant, especially in summer; it is the common method of preparing milk. In the course of the night there were some showers, but our carpets and cloaks kept us comfortable.

At dawn of day we bathed in the Orontes, and rode forward over the plain, where the grass was at least a foot and a half high. We were obliged to make a wide circuit to avoid a marsh, which occupies a large portion of the plain. It is formed by the overflowings of the Affrin river and the Lake of Antioch, and in the spring encroaches very much on the surrounding plain. The rushes grow in it to a giant height, of fifteen feet and more.

A marsh.

Eastern travelling.

It was a charming morning as we rode slowly over the plain. In travelling, the pace is never faster than a walk; but, though it would be tiresome to move so slowly anywhere else, there time is of little consequence—no one hurries. All nature was growing, and we enjoyed the freshness and pleasing sensations it communicated.

By-and-by some black tents of the Turcomans appeared; this plain is the chief resort of those who own the authority of the Pacha of Egypt. They are famous for their hospitality. We were invited to rest with them for a little while. They immediately began to pound coffee, to prepare bread, and to make 'leben.' The practice in making coffee is to roast a few grains upon a shallow iron ladle, then to pound them thoroughly whilst the water is boiling in the pot. The pounded coffee is then poured on the top of the water, allowed to boil up about three times, and is then poured out into tiny cups for each person. It is not clear, but the quantity in each cup is small, and the coffee pounded so finely, that the grounds are rather pleasant than otherwise.

Turcoman coffee.

The bread is prepared by rolling the dough into exceedingly thin cakes; these are laid for a minute upon an iron plate, slightly convex, over the fire, are turned once or twice with a cane; small blisters rise, and they are done; they are then laid by in a woollen cloth, to retain their freshness and heat. They are excellent. The 'leben' is a mode of preserving milk, and much more wholesome than milk, in a raw state: the method of preparing it is by placing the milk upon the fire till it just begins to simmer: it is then taken off, and a spoonful of former 'leben,' or any acid, is put into it; it is covered over, and allowed to stand; in a short time the whole becomes turned; it is of about the consistency of what is called 'thick milk.'

Bread-making.

Preparing 'leben.'

Whilst all this was progressing, we sat upon our carpets on one side, the Turcomans on their hams opposite, smoking and sipping coffee. Our arms, guns, pistols, and swords attracted their admiration; in fact, though they frequently express surprise at other things they happen to see in the hands of Europeans, they understand how to appreciate only arms and horses. These are necessary to every man who leads the life of an Arab or Turcoman. To the former they are still riches, for with them he acquires wealth by spoiling others; to the latter, they are not equally a source of riches, for they live in a country more effectively under the Government of Egypt or of the Sultan, and are no longer able to levy contributions upon travellers as they used to do.

Turcoman habits.

The Turcomans are a wealthy race; their tents are lofty and large, and they possess flocks and cattle in abundance. The Plain of Antioch is one of their districts of pasture; there they find abundance of water, and plenty of grass in the spring. As the summer advances that diminishes, and formerly, before the autumn rains had begun, they were in the habit of migrating to the mountainous country of the Taurus. Ibrahim Pacha, however, has interrupted that practice. He has endeavoured to break through their nomadic habits, and to force them to settle in one place: partly because, in their periodical emigration, they passed from his territory to that of the Sultan, which did not suit the uncertain peace in which the two Governments exist; and partly

Plain of Antioch.

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because he wished to encourage tillage and the growth of corn. With this view, those Turcomans who chose to migrate were to understand that they could not return, and the Pacha knew too well how necessary the fine grazing of the plains of Syria was to their numerous flocks to doubt what would be their choice.

Government of the Turcomans

In governing these races, the system has been, and is still, to make the chief responsible. The failing on the part of anyone to execute the commands which are given, is visited with such severity upon the chief, that he takes good care not to incur it. The mode of punishment is usually by fine—so many measures of grain, barley, indian-corn, or wheat; or so many purses of money, a purse being 500 piastres, or just now about five pounds of our money.

Having rested for two hours, we rode on again. The plain continued, but on our right it was terminated by a line of hills, at the foot of which, standing by itself upon an elevated spot, is an old fort. We observed here, as we had before, in the Valley of the Orontes, towards Hamah, the same remarkable mounds. We saw them again on the Plain of Azass. They are very curious, like giant molehills. I believe they are supposed to be volcanic; basaltic stones are seen on the sides of some of them, and scattered to a distance. What is still more curious to observe is, that these stones cover perhaps one side, but leave the other free; as if, when the little volcano was at work, the wind had blown what was thrown up in one direction—and if it were so, there must have been but one eruption.

Volcanic mounds.

As the sun got up the heat became intolerable, so that we were glad to make another halt under a single tree, close to the remains of a stone bridge. It was a fatal halt, for the pasture was there so good, that there was no persuading the muleteers to leave it. Delay after delay, upon one excuse or another, took place till ten o'clock at night; nor should we have moved even then had we not got into a passion, and so contrived to convince the muleteers that we were in earnest. No one can conceive, I think, who has not himself experienced it, how terribly patience and good temper are tried if you are travelling in Syria in a hurry, and have no interpreter or janissary to enforce your wishes. The muleteers are listless,

Disadvantages of good pasturage.

look surprised at your anger, but do not seem the least aware that they have caused it, much less that they could prevent it. They do not laugh, or show the least impertinence, but only let the storm rage and pass, and then they smoke again! We had to bear this more than once during this halt; but at length we broke through their obstinacy by running after the mules ourselves, and driving them up to be loaded.

Ancient ruins.

The road was now over a mountainous barren tract. Towards the morning we passed through a very ancient town in ruins. The buildings were of stone, well cut and well put together; it looked like the work of the Romans. The arch of a pathway still stretched across the road, which is paved with large paving-stones—such as are seen in Pompeii, for instance. One small building alone is standing, probably a private dwelling.

A morning halt.

Towards three o'clock in the morning the muleteers prayed for a halt. The spot was not in the least inviting; it was a barren stony side of a hill, where there was a well of dirty water. But we were very tired, cramped by the Eastern saddles and the slow tiresome pace; therefore, without one word of objection, we wrapped ourselves in our cloaks, and were fast asleep in a moment.

Aleppo.

The remainder of our journey was still over the same sort of stony country. At last Aleppo appeared. It is very striking, from its size, its minarets, its buildings, and its castle, which stands by itself upon a round hill in the middle of the city. But though the country all about is stony and desolate, the colours, owing to the climate, are rich and delicate; a pinkish-grey generally prevails in the distance, which is very beautiful.

Visit to Mr. Kilby.

We rode to the house of Mr. Kilby, a British merchant, who had undertaken to transact the business of the Expedition—a very active, industrious, intelligent man, who had lately established a firm in the place in connection with Glasgow. At his house afterwards we always met with hospitality and kindness. It is no small advantage to have a place of refuge in Aleppo; for the public khans are very disagreeable, and the usual system of having a billet upon a private house is not so common as elsewhere, owing perhaps to the many travellers who pass through, whose number would make it

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burdensome to the inhabitants. The public khans are poor places for a tired traveller. They consist usually of a square courtyard, around which are long stables for animals, and small rooms for men. The stables are prepared with small niches in the walls for mangers, and the room is a plain chamber about ten feet square, with a door to the court, of which the keeper of the khan gives the key. For the poorer travellers, muleteers, and attendants to the animals, there are large open recesses, where they deposit their things and sleep. There are no servants to furnish the necessary wants, but a shop is generally established at the entrance, where forage is to be bought as well as bread, and where, over a charcoal-fire, small rolls of meat strung upon a skewer are to be seen cooking; they are called 'khabaubs,' or delicate morsels. It is rarely that the European traveller of any pretension is obliged to have recourse to the public khan. The Mutsellim of the town will either receive him himself, or more usually assign him to some good house.

Public khans.

Aleppo is well-built for a Syrian town, chiefly of stone: the streets are narrow—no windows look towards them. Some of the houses are large and handsome within. The bazaars are very extensive. There is a quarter for the tailors, others for the slipper-makers, the linendrapers, the druggists (which includes confectioners), the workers in gold and silver; in short, every trade associates by itself, and occupies a separate bazaar. The castle stands upon a considerable elevation, which I believe is artificial. It is surrounded by a deep ditch, and the face of the mound is paved with cut-stone. The entrance is by a causeway upon an arch stretched across the ditch.

Description of Aleppo.

But striking as is the effect which Aleppo produces at a distance, and superior as it is to other cities in Syria, still the traveller cannot but feel disappointed when he is within the walls. Every town in the East has a sombre character, and in Aleppo the dire destruction from the last earthquake has not been repaired or cleared away. As we looked from the top of Mr. Kilby's house, and could see into some of the neighbouring buildings, we could discover heaps of rubbish all around. There is no spring in the constitution of a Turk; he knows nothing of the principle 'aide-toi et Dieu t'aidera.'

Sombre character of Eastern towns.

Effects of earthquake.

He bears the blow which crushes him with resignation, and has no rebound within himself to help him up again. For this reason—and also, it must be owned, because the constant demands of the Government carry off a large share of the means—Aleppo is left in ruins. The trade, however, is considerable and increasing. A few English houses introduce cotton goods from Manchester and Glasgow, and create an improving traffic with Bagdad and Diyarbekr. It is a trade which should not be neglected. In former days it was very great. The Euphrates used to transport large quantities of goods from Bir to Felujah, from whence they were conveyed to Bagdad by canal; added to which, caravans of some thousands of camels used to cross the desert. Of this trade, that by the Euphrates has disappeared; but the caravans are still in full march, and thus the productions of our manufacturing districts are conveyed into the interior of Asia. Oriental patterns are sent home, and cotton goods come out to supply the wants of people who are so distant that they have hardly heard of the country from whence this imitation of their own manufactures is brought, and know nothing of the wonderful machinery which can provide them, even there, cheaper than they can make them for themselves.

Trade of Aleppo.

Round Aleppo there are some few gardens; a small river supplies water; the bazaars are extensive and busy; the hum and hurry and confined air render it fatiguing to pass much time in them.

Its gardens and bazaars.

Upon this visit to Aleppo, the British interests were entrusted to a miserable Italian, who was so much alarmed at the idea of mixing himself in the affairs of the Expedition, that it was useless to expect any assistance from him. My business was to remonstrate with the chief officer for his conduct in stopping our camels, and for the interruption with which the Expedition met. But our poor Consul could not be brought to comprehend what was his duty as British agent; I was therefore obliged to do without him. However, I had no success in my negotiation. The officer in command was Ishmael Bey, a young man, I should think, between twenty-five and thirty years of age. He had none of the usual shuffling of the authorities, but, with perfect politeness, told me plainly (though he shook with nervousness

Inefficient Consul.

Ishmael Bey.

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at the responsibility he was incurring), that he had sent to order back the camels, and that no assistance would be given to the Expedition. During our interview we heard the slapping of the bastinado in the court below. Mr. Kilby looked out of window, and saw a man on his back with his bare feet tied over a stick, and receiving upon them the strength of two men with 'kudbashes'. The 'kudbash' is a horsewhip made of rhinoceros-hide, and inflicts terrible blows. Ishmael Bey had the bad taste to look out also, and laugh at the pain he himself had ordered.

The bastinado.

I now determined to proceed to Reschid Pacha at Diyarbekr, and wished to take the line by Beles. After much difficulty in finding a muleteer who had ever heard of the place, at length one was hired, who undertook to conduct us. At the same time I wanted an interpreter and a servant. The former was soon engaged—a clever little rogue, who understood French, a little Italian, Arabic, and Turkish. The servant, however, was not so easily settled; those who wanted places could not bear the idea of so long a journey, or the dangers of so much desert. The Aleppines are an effeminate people, and cannot believe in security unless surrounded by the walls of their city. I saw no prospect of getting a servant, and determined to set off without one; but the evening before our departure a little fellow presented himself who could speak only Turkish and a little Arabic. He was an Armenian; his eye was so sharp, and he appeared so intelligent, that, though I could not tell how we were to communicate with each other, I engaged him at once—and I never afterwards had reason to repent; he was a most faithful fellow, and watched every motion to find out what was wanted.

Determine to visit Reschid Pacha.

Engage an interpreter

An Aleppine servant.

Whilst we were at Mr. Kilby's house, we saw a curious process of striking a bargain upon a sale he was making of certain goods to a native merchant. There are brokers who are employed by both purchasers and sellers; they learn what goods a merchant has, and what are his prices; when he receives a fresh cargo they inspect it, and make themselves acquainted with the views of the merchant: thus prepared, they perambulate the bazaars to find out purchasers, and are able to conduct them to where they will find what they

Native brokers.

want. They then arrange the bargain—an affair sometimes of days, but always of hours; the merchant asks more than he means to take, and the buyer offers less than he means to give; the steps by which they approach to an agreement are tiresome beyond description. In this case there had been much higgling in the morning, but with no result; in the evening, however, we were disturbed by the entrance of the broker, who came dragging his victim by main force, talking fast and loud, and using actual violence to compel his man to finish the business and make the bargain. But no—that was not to be accomplished yet. Then he ran at Mr. Kilby, seized him by the hand, and insisted that he should agree to the purchaser's terms. But no—Mr. Kilby was firm, and could not be moved. The broker hereupon got furious, and at length drew them violently towards each other, seized the hands of both parties, joined them, and declared the bargain concluded. Mr. Kilby did not affect all the sorrow customary on such an occasion, but the native merchant did; you would have supposed he had given his hand to something by which he had sealed his ruin, and he wept aloud.

Eastern bargains.

On the 15th we set off, at half-past six o'clock in the evening, and travelled till three in the morning, when we bivouacked close to a curiously-built village; every house was roofed with a dome drawn rather to a point.

Leave Aleppo.

May 16.—We mounted at sunrise; the country was plain, with a good soil, and plenty of grass. Towards midday the heat became excessive; we halted by some water, but had no shelter from the sun, and therefore could get no rest. In the afternoon we continued our journey till 10 P.M., when, after crossing a rapid stream by a ford, we found so tempting a spread of grass, that we laid ourselves down and enjoyed a delicious rest—the sky above glittering with stars, and the river rippling in our ears.

May 17.—Our journey was again over a plain-country: indeed, I remember no part of the road from Aleppo which would be impracticable for a carriage. About 9 A.M. we could discern a line of bluish heights, which we suspected to be those of the Euphrates—the great and interesting river to which we were all looking with so much anxiety; at 10 o'clock we touched upon a largish town (Mizar), from whence great

Level character of the country

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abundance of oil is carried to Aleppo: we did not enter it. At a well here we found a poor Jew, who gave us some water to drink; he said he had been waiting five days to be allowed to enter the town, and that he was now expecting the return of a messenger sent to Aleppo for a 'tuskarey' or license to that effect. The poor Jews are considered fair game for the exercise of every governor's caprice.

Arrival at Bir.

In two hours from Mizar we reached the Euphrates itself, just opposite to the town of Bir, or Birejik; the first is the Arabic name, and the second the Turkish. It has a striking appearance, having an elevated castle looking immediately over the river. The walls of the town are built perpendicularly from the water, and the ground rises much in the rear, so as to give a view of the whole extent of the place. Close along its walls flows the Euphrates: in the spring, during the high water, it is about half a mile in breadth, but in the autumn it is reduced to about 200 yards.

Ancient passage of the Euphrates.

At Bir is the chief place for crossing—indeed, it is the only place till you arrive at Anna; though the Arabs do cross upon skins and rafts wherever they desire, and when the water is low, they have fords by which camels pass at different places. But Bir is the established passage, and has been so ever since the days of Abraham, who himself is supposed to have crossed there, when, following the guidance of God, he migrated from Haran to go into the land of Canaan.

Ferry boats

The boats for the ferry are, perhaps, as old in construction as those which Abraham himself may have used. They have a flat floor with high sides; at one end is a raised platform for the steersman, who performs his duty by working a long heavy sweep, which is balanced over that end. The other end of the boat is open; the floor merely rises up about a foot to keep the water out, but otherwise it is an open entrance, the full breadth of the boat.

In speaking of Bir as the only passage till you come to Anna, it is right to explain that it is the only place southwards: for above it are the crossings of Rumkala, Samsat, &c. Upon coming to the water we found an officer under a tree: he belonged to the service of Ibrahim Pacha, and was on outpost-duty to watch the ferry. Upon my return from

Diyarbekr afterwards, a change had taken place in the territorial boundary of the two provinces. By the treaty of peace, Ibrahim Pacha had to give up the whole of the pachalic of Orfah, which he did with great reluctance, and tried by all means at least to keep the boundary of the Euphrates; but through the interference of England and France he was compelled to yield, and therefore had to retire to the line of the Sedjūr, a distance of ten hours back.

Reach Birejik.

Whilst we were detained waiting for permission to cross, we rode up the river, but by doing so had wellnigh lost the chance of getting into Birejik that night; with much difficulty the governor was persuaded to admit us, but not without the precaution of sending a guard of 30 men for us, to ensure him against surprise from Ibrahim's men.

Visit to the governor.

May 18.—We visited the governor. He was an old heavy-looking man, who began his intercourse with us with abundant professions and promises, founded upon his vast expectations of gain; but being too rapacious, he was disappointed: he turned out a treacherous bad fellow, and an addition to our other difficulties. When visiting him we had an opportunity of seeing the castle; it stands upon a rock cut off from the town by a natural separation, but having the slope at the foot of the walls strengthened by a facing of stone, similar to the castle at Aleppo. The interior has been quite ruined by earthquakes.

Journey from Birejik.

At one o'clock we resumed our journey. The country was barren of everything except shrubs of wormwood. A large herd of camels was grazing not far from Birejik, and for the first time I saw them move faster than their customary stately walk. The cameleer wanted to collect them, and had mounted one: he had no halter, but seated on the animal's back, with a thick stick in his hand, he drove the creature at a long trot, guiding him from one camel to the other merely by laying the stick either against one side or the other of the neck.

In the evening we halted for two or three hours, and then rode on till about three o'clock in the morning; when, having crossed a mountainous track, and being excessively tired, we turned our animals a few paces from the road, spread our carpets, and went fast asleep. How long that lasted I cannot

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tell; but suddenly I was awoke by a noise. I sprang up, and saw Antoine, our dragoman, with my gun, hallooing after a man, who was running off as fast as he could. Antoine told me this had been the third he had seen lurking about us.

Encampment of Arabs.

When the sun rose, we found ourselves not far from an encampment of Arabs, from whom we procured 'leben,' bread, and 'khymack,' which last is precisely Devonshire cream. Presently, as we sat eating, an Arab came riding up, his lance in his hand, and his handkerchief folded three-cornerwise over his head, having one corner hanging down on each side of his face, after the Arab fashion. He dismounted, and stuck his spear upright in the ground, secured his mare by tying her head to her foreleg, and then passing the halter on to the hind-leg; such is the practice always. He then approached us with salaams, and took his place upon his hams opposite to us. He had a forbidding countenance, but he turned out a good specimen of an Arab.

Arab and his mare.

His mare now became the subject of conversation: she was a pretty creature, showing high breeding. He told us stories of how she had saved his life many times—how she had brought him foals; and praised her powers of endurance, her many virtues, and her value to him when bound on plundering excursions, of his success in which he boasted openly. We wanted water, but, there being none at hand, he mounted his mare, and rode off with a leathern bag to fetch some; soon he returned cantering over the country, followed by his son, a little child, upon the young foal of his mare. He was fond of his son, and of the foal too; they seemed to share his affection equally. He told us his son came to salute him in the morning, but he bid him go salute his mother, the mare, who brings him all that he has to eat. True or false, I listened to these stories with great interest; they were such stories as we have always supposed characteristic of these curious people, and here they were from the mouth of one of themselves, expressing clearly their thoughts, and habits, and ways of life.

Price of horses.

The Sheikh of the tribe next rode by upon a beautiful roan, only three years old. I asked him to sell it; he wanted 3,000 piastres (30*l.* sterling). I offered, by the direction of the dragoman, who pretended to be knowing in horses, 10*l.* But the Sheikh knew the value of his animal, and rode away.

This reminds me of another instance, proving how much these people value their horses, and which adds not a little to their interest. Whilst we were resting in the evening, an Arab, mounted on a delicate bloodlike mare, with a foal by her side, rode to the well where we were, to water. I asked him to sell his mare; but he said, for all I could give him he would not part with her. She had all the appearance of a pure blood—a fine intelligent delicate head, a prominent eye, graceful in movement, with great sinew and strength.

Arab attachment to horses.

In the evening we reached Orfah. The approach is over a steep rocky mountain, on the descent of which, towards the town, the road is cut with some care into broad steps, like those in the palaces at Rome. Orfah stands at the bottom, backed by mountains, and with a plain of alluvial soil to the south-east, as far as the eye can reach. The face of the mountain behind it has a curious appearance, from holes and caverns, which have been used as dwelling-places at different times. The town is surrounded by a wall, and upon a high rock overlooking it is a castle in ruins. Two remarkable pillars stand up in the midst of it, about which there is a story told, that a certain cruel King Nimrod made use of them as a place of punishment: there was a chain stretched from one to the other, and a beam so attached that, when drawn back and suddenly let go, it should fly forward with great violence. The poor victim was placed upon this beam, and thus shot over into a volcano which used to exist below. Tradition states that a holy man had been doomed to suffer this punishment, but was miraculously saved from hurt by the volcano being suddenly converted into a pool of water, so that he fell into it uninjured. The pool is now a tank of water, enclosed by cut-stone, which ornaments the front of a very pretty mosque of unusual sanctity. There are fish in the tank so tame that they swim after anyone who approaches, for the sake of food, which is frequently given to them. Christian strangers are allowed to walk by its side, but not to sit, as I discovered from having excited some indignation by sitting down to sketch the mosque: an old Turk came up to me, and requested me to move away.

Reach Orfah.

Tradition of Nimrod.

Orfah was the famous Emessa of the time of the Crusaders.

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The town of Orfah.

It is built of stone chiefly, and looks well at a distance; but within it is poor, deserted, and dirty. Not long since, at the beginning of the present Sultan's reign, it was a place of importance, full of janissaries, and vying with Damascus in Mahomedan bigotry. The destruction of the janissaries, however, and the change in the system of Turkish government, has, like that in the government of the Pacha of Egypt, put an end to religious persecution. Europeans, and even native Christians, enjoy some relaxation from former ill-treatment.

An instance of Turkish liberality.

Whilst I was at Orfah, an instance occurred of how much matters had changed at Constantinople, and how hard a lesson was now to be taught the arrogant Turks of this place. A regiment of cavalry fresh from Stamboul marched into Orfah; the barracks had to be furnished with mats for the soldiers to sleep upon, as was customary. The Christians were applied to, and required to furnish the quantity wanted; but amongst them all they could not find enough, except by giving up those upon which they slept themselves. This the governor insisted they should do—in short, provide them they must, somehow or other; but they, in despair, referred to the colonel of the new regiment, who, having learnt more liberality at Stamboul than was common at Orfah, and less veneration for a mosque, ordered that the Christians should be spared, and the complement made up either from the Turks or the mosques. The Turks were horror-struck, and gave none, so the colonel sent his soldiers to the mosques to provide themselves.

Bazaars of Orfah.

The bazaars are better built and better supplied than would be expected from the general appearance of the place: indeed, though not so extensive, they are better kept, better built and ordered, than those at Damascus.

The Armenian Convent.

We took up our quarters at the Armenian Convent, where Lieutenant Lynch, of the Expedition, and his brother were already lodged. One room was given to us within the close of the church, which until our arrival was a school; but we partook of Lieutenant Lynch's fare, supplied for him by the Bishop, in whose house he had quarters. His home, the church, and our room were all enclosed within a wall having at the entrance an arched gatehouse.

Lieutenant Lynch was negotiating for camels, hoping that, if they were engaged within the territory of the Sultan, the Egyptian authorities would not interfere with them, and we might in that way be able to transport our stores to the great river. But the camels could carry only a portion of the stores; and after-experience proved that oxen, horses, men, and waggons would all be required to convey the heavy boilers and parts of the steam-engines.

Negotiations for camels.

Leaving Lieutenant Lynch to continue his business, we pursued our journey to Diyarbekr. The first day's journey was chiefly over the desert, with here and there a few scattered black tents, until about midday, when we fell in with an immense encampment of Kurds. Their tents covered the face of the country, and though at first sight quite irregular in their order, yet as we rode through them we could discover the tent of Malik Selim himself, the chief. Its size and importance, with that too of those around, indicated the dwelling of a great man; whilst in groups—some on elevated ground, others in the valleys—we saw that the smaller divisions were arranged round their own Sheikhs, whose tents were marked by the tall spear, with its bunch of ostrich-feathers at the head, stuck upright in the ground at the tent-door, where also stood the horse ready-saddled, and picketed by his legs.

Encampment of Kurds.

This encampment was under Malik Selim, the son-in-law of the chief of all the Kurds of that country, who, with his immediate followers, had pitched his tents at no great distance off. The grazing ground of this powerful tribe extends southward to the neighbourhood of Racca, and north towards Samsat. The numbers included in the encampment we saw under Malik Selim were said to be 30,000. Jub Agha, the father-in-law and chief, had probably not less with him. The Kurds have large flocks and herds, camels and horses; their tents are large, and indicate riches; they are a very important and powerful people, whose independence had been, as yet, scarcely interrupted by the officers of the Sultan; they exercised lordship over a vast extent of country, and though they owned the Sultan as their sovereign, and the chief of their religion, it was rarely that they could be compelled to pay their share to the public treasury.

Malik Selim.

Jub Agha.

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Career of Reschid Pacha.

But just at this time the tide was changing. Reschid Pacha, whose name is well known in Europe—the same who was sent to subdue the famous Ali Pacha of Jannina, and afterwards was employed in the war with Russia—had lately been appointed Pacha at Diyarbekr and Vizier of Asia Minor. He was a vigorous determined man, and had already waged a successful war against the Kurds to the east of Diyarbekr—a people not known, in the life of anyone living, to have yielded obedience to the Sultan; but he had driven them from the plains, and followed them to their mountains, carrying artillery over parts considered before impracticable—burning their villages, grinding those he caught, till he compelled one chief after another to pray for mercy and submit. These successes had frightened the Kurds of Jub Agha, and at the time we saw them they were in suspense to know their fate.

In Reschid Pacha's councils there were also apprehensions from the character of Jub Agha himself, and the number of his tribe. The Kurds were doubtful whether to submit or not, whilst the Pacha was uncertain how to induce submission by intrigue, without risking an open war against people who, having no settled habitation, can move here or there, advance to fight, or retire into the desert with equal ease.

Flocks and herds.

The encampment we fell in with was a fine sight—so extensive, the flocks and cattle so numerous, and the tents so large. It was remarkable how accurately each flock followed its own shepherd, and even at the well, where two or three flocks were waiting, huddled together, they kept their separate parties complete, pressing close upon the heels of their own shepherds. The horses are also fine, somewhat larger than the Arabs, very handsome and powerful. This day we chased a wild sow, followed by a young pig, but it took to the hills and beat us. In two days we came to Severēk, a poor but ancient place. There are the remains of a castle, having a surrounding ditch and some portion of the walls still existing.

Severēk.

From Severēk we crossed a very stony tract, ascending into a hilly woodland of scattered trees; then descended into an extensive plain, upon which were dotted, here and there, a few groups of tents. In those which lay in our road we found ample hospitality.

Next day, after passing through a wild country covered with trees, we came to another valley, highly cultivated and very wide; at the distance of about a league and a half stood Diyarbekr. As we approached, we found it to be surrounded by a high wall, in tolerably good repair, with towers at about sixty paces apart, and a ditch.

Approach to Diyarbekr.

At the gate we had to wait whilst our dragoman rode on to the governor to ask for quarters. It was an hour before he returned, when with him came two janissaries abreast, followed by the janissary-in-chief; these preceded us through the most public parts of the city, creating so much noise, and causing so grand an effect, that all the people in the bazaars stood up as we passed.

The house which had been fixed upon was that of a Christian, a rich man, who treated us with overwhelming consideration. He considered it his duty always to be with us, and even asked permission one evening to accept an invitation out, which he could not bring himself to do without many apologies.

Our host.

In the evening we had supper, preceded and followed by tea instead of coffee—a practice common in Persia. It was served in the same little cups as are usual for coffee, and without sugar or cream. After supper two musicians were introduced, whose instruments were a long-handled guitar, with a small hollow for the sound—I believe a dulcimer. Upon these they played, accompanying their voices. An attendant stood by to hand round tiny cups of spirits from time to time. As the spirits were introduced the voices were raised, and as they grew louder the old Christian's heart expanded. He was delighted, encouraged the musicians to still greater efforts, and rewarded them again and again with spirits. Every evening was the same.

A Persian supper.

Upon paying a visit to the governor, we found him seated upon an open divan overlooking the Tigris. Diyarbekr is a rectangular enclosure, of which three sides are towards the plain, and the fourth is along the top of the high bank of the valley of the Tigris, which flows immediately below. Upon this face is the castle, the residence of the pacha and governor. The pacha was away upon his expedition to tame the Kurds, but the governor received us with great

Description of Diyarbekr.

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civility. As usual, he did all he could to detain us, but in four days we set off again.

River Tigris.

The Tigris at Diyarbekr is shallow enough to ford in the low season, though it is deep in the spring. At this time it was still high, but decreasing; it was of a reddish colour, and too muddy to be used for bathing.

We crossed the river by a stone bridge of an ancient date, in very good repair, about half a league below the place; and then rode over plain-country, partly cultivated, but more generally pasture. Villages were rare, though they were met with occasionally. Their character resembled what we had seen before—poor ill-favoured mud tenements. The ground seemed very rich, with a deep alluvial soil. The people were different from those to the west of the Tigris; these were a tall, strong, well-formed race, with a steady eye and independent look. In dress they resembled them—a long shirt down to the ankles, pendent sleeves to near the ground, large red boots, and a turban upon the head.

Mud villages.

Messorein.

In a day and a half we came to Messorein, close under a high mountainous ridge. It is a place of great antiquity, belonging to the better days of the country, and is surrounded by walls of cut-stone, put together with great care. The interior is now a ruin, almost without inhabitants. Close to it we saw the remains of gardens, ornamented with stone conduits for water, which flowed in from a beautiful clear spring. A few shrubs were scattered about, still looking fresh and pretty.

From Messorein we immediately ascended a high rocky ridge, part of a principal chain which, enclosing a large space of plain-country, extends from the Tigris far above Diyarbekr, and reaches again to the Tigris south of Messorein. Over this we rode for about an hour, when we came to the small village of Ferhand, on the side of a hill, having gardens and cultivation in the hollow. Here we slept in the house of a Christian, who was in great anxiety about his fate and that of the village. Faro, one of the chiefs of the Kurds, and the only one still in arms, had lived there. His house, more considerable than usual, had been burnt and destroyed by the Pacha, and the villagers dreaded how far they would be made to suffer with their former lord. We were treated with great hospitality and attention, under the impres-

Village of Ferhand.

Lt Col. J.B.B. Estcourt delt

Fairland lith.

sion that we should have influence with the Pacha, and also from an extravagant idea, which had spread through almost every part of the country where we had been, that we were come to take possession of it, and thus accomplish their tradition, that the Turks shall be subdued by a European Power, and the whole country become Christian. This expectation is entertained by Turks as well as Christians. The Turks believe it to be so decreed, and are content; the Christians hope for it, and anxiously look to every event they can construe into a sign of the coming change. Our arrival in this country had excited these long-cherished desires, and to it we were indebted, I believe, for some of the overstrained attention we received.

Turkish and Christian tradition.

From Ferhand the country was again rocky and mountainous for two hours, when we descended at the gorge of a valley to the village of Zozee; it is built on the side of the hill, close to a remarkable perpendicular cleft in the rock, through which a river flows: it is a curious and very picturesque spot. The water is deep and clear, about eighty yards broad; on the other side, the left bank, is a valley of fine pasture, with a grove of olive-trees, under which the Pacha was encamped with all his infantry and artillery. We took up our station upon a given spot close to the village, and the next morning forded the river at a difficult place to visit the Pacha. We found him sitting under a common tent, surrounded by his officers; the infantry had piled their arms in a large square before him, and two pieces of artillery were alongside, protected from the scorching rays of the sun by boughs of trees spread over them, and we saw that the men were employed in cutting branches and boughs to cover the arms of the infantry; everywhere they were to be seen dragging their spoils from the neighbouring groves.

Zozee.

The Pacha's camp.

The Pacha had a very handsome intelligent countenance, with a white beard, and fully bearing out his character for activity, boldness, and ability. I presented to him the firman of the Sultan, which he immediately put to his head, in token of his submission to his master's will. It was then read to him, and we conversed a short time; but I could perceive he did not comprehend our Expedition, and very much feared to compromise himself. He got

The Sultan's firman.

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impatient with the Turkish of my dragoman, which was not good, and sounded disagreeably to him, and therefore he made him speak Arabic, having that translated to him by an officer of his own. At length he became more impatient, and finding a fitting moment, he made his salaam, and slipped out through the back of the tent to one more private in the rear. I, however, was not satisfied to allow him so to escape without giving some answer to my demand of assistance, and therefore I named an hour in the afternoon, after the mid-day rest, for another visit. When the time came, I found him, as before, perfectly civil, but anxious to put the matter aside, and pledge himself to nothing. However, though he would not promise to furnish an armed protection for us at Beles, he said he was upon the point of marching into that country, and then would arrange something to ensure safety to our establishment and stores; in the meantime, he gave me a 'boyardhi,' or order, to the governors and all officers under him, to assist us in every way. These orders are sometimes attended to, and sometimes not: it is said that those to whom they are addressed have private means of ascertaining how far it is desired by the chief that they should be obeyed, or whether they have not been given to get rid of importunity, or to satisfy a demand it may not be politic to refuse. This I knew, and therefore was but little contented with what I had been able to effect; however, I could get nothing further, and therefore retraced my steps towards Diyarbekr; there our Christian friend received us again under his hospitable roof. The same scenes were renewed as on our former visit—the same attention to us, the same loud singing, and the same drinking. We had been absent six days, yet even in that short time the Tigris had materially fallen; so much so that we found no difficulty in fording it upon horseback just below the town—indeed, we even saw a donkey fording near the same place.

Interview with the Pacha.

Return to Diyarbekr.

On June 7 we left Diyarbekr, rode by the route we had come thither, visited the same tents, and saw the same people. At the encampment where we had slept the old man was absent, but his daughter came out to greet us, and welcome us to our former seats in her father's tent. In the country the women are not so careful to hide themselves; indeed, it

would be impossible to conduct the operations done by the women, and maintain the seclusion of the towns. As we were crossing a plain already mentioned, with clusters of tents here and there, I saw for the first time in my life a target in actual use; it was of a small size, about a foot in diameter, made of buffalo hide, rather convex, strengthened by strips of brass and nails, ornamented with red paint, and a tuft of ostrich-feathers in the centre.

A native target.

According to the general practice, we were conducted from one encampment to another, and furnished with fresh horses at each, and, whenever we allowed it, with refreshment; but at one of the places to which we came, the people had been so tired out by the number of rapacious travellers that they were not inclined to receive us; but so careful are they of their character for hospitality to strangers, that when, after many excuses and much wrangling with the people who had brought us to them, I determined to walk on on foot, and actually set out to do so, an old man ran after me, kissed my beard repeatedly, and begged me not to bring discredit upon his tribe.

Arab hospitality

After leaving Severēk, we fell in with a part of the large tribe of Jub Agha. They were anxious to know about Reschid Pacha—where he was, and what he was doing, and whether he spoke of coming towards them. They called upon the muleteer with us to tell the news of Severēk, and at once showed how little cordiality they had with the towns-people, by addressing the man with, 'Dog, son of a dog! whose dog are you?'—the poor man replying with all humility to their insulting questions, as if addressed in the civilest language in the world. These Kurds had large handsome black tents, supported by long poles. They are put together in a simple manner. Each cloth reaches from end to end, and is nearly a yard and a half wide: two cloths are sewn together to make one breadth; each breadth is furnished down its edges with loops and toggles, so that the breadth of the tent may be extended at pleasure, by looping on as many breadths as are required. It seems to be done precisely in the manner described in the Bible, in the thirty-sixth chapter of Exodus, which explains how the curtains of the Tabernacle were coupled together by loops and taches

Tribe of Jub Agha.

Tents of the Kurds.

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down the edges. Every year a fresh cloth is made by the women, and added, and the oldest is removed; thus, by a constant succession, the tent is kept in repair without much trouble. The elders with whom we sat were dignified personages, of good manners, with a full confidence in their own importance; they wore remarkably large turbans, made of folds of white linen wound up to an unusual height and grandeur, and bound together by a diagonal black handkerchief.

The Bishop of Orfah.

At Orfah we took up our quarters, as before, at the convent. The Bishop paid us a visit: our conversation turned upon the condition of the Christian population; he told us it was about two years since better times had begun with them; previous to that, the town was full of proud fanatic janissaries, whose tyranny was beyond endurance. They would come in a party to the convent-gate, demand admittance, which could not be denied them, require a supper, even money sometimes, and having got all they asked, for pure sport they would set upon the humbled Christians and beat them. With such treatment awaiting every Christian that is born, it is surprising that young men should not have emigrated, to seek a better lot under a juster government; but the reply to such a question was, 'What could we do? We hope for better times, and trust in God.' For the last two years their fate has been better, but still they suffer much cruelty and injustice. This better condition began with Maho Bey, a native of Orfah, who having resided near Ibrahim Pacha, and his father, Mehemet Ali, had imbibed the liberal ideas which have done so much credit to those extraordinary men. Orfah fell by the right of conquest to Mehemet Ali, but by the treaty of peace between the Sultan and the Pacha of Egypt after the Battle of Kornah, it was to be restored to the former; yet the Pacha retained possession of it, until France and England interfered, and compelled him to fulfil the terms of the treaty. But the reign of the janissaries has passed away, and though Maho Bey is gone, yet the poor Christians still enjoy some of the better treatment which they received under him.

State of the Christians at Orfah.

Career of Maho Bey.

On Sunday, June 14, we returned to Birejik, but so late that the gates were shut; however, entrance was soon ob-

tained by means of a small bribe, tendered by our dragoman.

Leave Birejik.

June 16.—We left Birejik, meaning to clear the road to Suedia, by which our stores were to be transported. It is right, when speaking of a road, to explain that no such thing exists in the country beyond a mere horse-track. There are no enclosures except near the towns; therefore the whole country is open, and, avoiding the cultivated ground, may be traversed in any direction.

Chammoli.

June 17.—At the tents of Chammoli it was necessary to remove some large stones, and workmen were required from the Sheikh, to be ready at daybreak the following morning.

June 18.—Of course the men were not ready; but by being sometimes in a passion, and sometimes in good humour, as the case required, we at length obtained them; and the stones were removed. In this way we contrived to clear the line of its chief difficulties, as far as Gachmool, near Azass, about halfway between Aleppo and Birejik.

Clearing the line.

June 19.—We rode to Aleppo from Gachmool.

June 20.—Introduced to Mr. Werry, the new British consul lately arrived from Smyrna.

Breakfast with Jusuph.

June 21.—Breakfasted by appointment with Jusuph, Mr. Kilby's dragoman: his family are remarkable for their neatness and cleanliness. He told me he had but one servant, a female; that his family performed all domestic operations: the consequence was perfect order, cleanliness, comfort, and economy. These occupations did not, however, take from the delicacy and pretty manners of his wife and daughters. They presented pipes and nargilehs, prepared by themselves, with coffee, sherbet, and the other pleasant luxuries with which a stranger is welcomed; sometimes they sat down with us to talk, and sometimes were busy in serving the party, but all so quietly, and without effort, that it did not the least interfere with the conversation, or occasion the least distress, from over-politeness. The manners of all the family were remarkably good, but, strange as it may appear, the daughters could neither read nor write. The mother was better educated; she could read and write Arabic, and now latterly had made some effort to gain a knowledge of French. Jusuph himself was better taught than most people in the country, yet he

Dragoman's family in Aleppo.

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had not thought it imperative with him to teach his children. It seemed a curious omission, for Jusuph and his wife were excellent people, amiable, of good manners and morals, and formerly had been in better circumstances; yet they were contented to bring up their children without the most trifling literary acquirements.

Turcoman camp.

June 22.—Setting off at about 4 A.M., we rode all day towards Antioch. In the evening we stopped at an encampment of Turcomans. The Sheikh, at whose tent we alighted, had three wives; two were middle-aged, but one seemed to have been lately taken to his harēm. She was young, rather pretty, lively, and was petted by the others. The Turcoman women in their own encampments do not conceal their faces, or care the least for the exposure. They do all the domestic work: they grind the flour, make the bread, prepare the 'leben,' churn the butter, and besides make all the clothes that are wanted by their families—the black haircloth for the tent, a sort of carpeting to sit down on, and other carpeting, of which they make bags for their stores, and which in travelling are slung upon their camels and their cows. These are worked in patterns, and form part of a well-appointed tent. They are ranged round the inside, and make a sort of wall to enclose the more retired part. They contain the store of rice, of 'boorgool' (an excellent preparation of wheat, used as rice for pilaus), of flour, of wheat and indian-corn, besides the clothes of the family, and the minor stores of salt and spices, and so forth. Thus the neatness of the tent is preserved—everything has its place, and is carefully kept there: were it otherwise, the various articles would soon be scattered and lost. Without walls to keep them within the enclosures, they would soon find their way beyond the limits, and not return again. I have often remarked the constant care the women pay to the covering of their tents, and having lived for some months precisely the same tent-life, I have learnt how necessary this is.

Turcoman women.

Arrangement of tents.

A marsh.

June 23.—On our road to Antioch we became puzzled by the extensive marsh which crossed our path, and covers a large portion of the plain in front of Djezzer Hadid. My poor horse, an animal hired at Aleppo, was tired at starting; but by constant spurring he reached his journey's end, when,

Return to Antioch.

on alighting at George Dibbs's door, I found to my horror what mischief I had done with my heels. The stirrups of the country are of a long shovel shape, supporting the whole of the foot; the corners are very sharp, and serve as spurs. They are the only spurs an Arab uses, but they must be used with moderation, or they will wound the animal's flanks, as I found I had done.

Road to Suedia.

In the evening I rode on again towards Suedia. On the way I passed Eden with a caravan of waggons laden with our stores; Fitzjames followed with others, besides camels and mules—all proceeding slowly and with great labour towards the station at Birejik. I arrived at our station a little before midnight.

Arrive at Birejik.

APPENDIX V.

REPORT OF A TOUR FROM BIR TO EL-DEIR (1836).

BY CAPTAIN HENRY BLOSSE LYNCH, C.B., K.L.S.

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Visit to the Arab tribes of Sinjar.

In compliance with the instructions given by the British Government to Colonel Chesney, that some officers should visit the great nomadic and cultivating tribes residing on the banks of the great river, as well as those pasturing in the plains of Sinjar, and communicate to them our intention of navigating the river, of making arrangements for depôts of charcoal, and whatever provisions might be required during our descent of the Euphrates; also to ascertain the strength of the various tribes, and to what probable extent we could cultivate a friendly feeling with them :

Officers selected for this journey.

The officers selected for this duty were Henry B. Lynch, Lieutenant, Indian Navy; A. A. Staunton, afterwards assistant-surgeon, Royal Artillery; Mr. Elliot, interpreter; and Lieutenant Robert Lynch, of the E.I.Co.'s Service, who kindly volunteered his services. It was on the evening of September 1, 1835, that the party left the little encampment seated on the right bank of the river a mile below Bir. Night was selected as the fittest time to commence the journey, being less likely to fatigue the horses, which were to proceed through the whole journey. The weather during the day was intolerably hot, and the nights intensely cold. On the second day we reached Orfah, a pachalic of considerable importance. Here it was advisable to make arrangements for our future progress.

Road to Racca.

As the path to Racca was one untrodden, and to the traveller unknown, it was the great wish of our party to have some influential person from the divan of the Pacha to accompany us as far as Racca, and to introduce us to the cultivating tribes that might then happen to be occupying the great Plain of Sinjar. After much intrigue from the numerous hoary-bearded advisers of the Pacha, we obtained two Govern-

ment cowasses and an old moolah, who undertook to ensure a favourable reception for us as far as Racca.

Departure from Orfah.

Having made all the requisite preparations, we started from Orfah at 3 P.M. The resting-place proposed for the night was Haran, celebrated in Sacred History as the birth-place of Abraham, and in classic lore renowned for the death of Crassus. It is distant from Orfah eight to ten hours. During our progress across the plain we had an opportunity of witnessing the effects of the well-judged policy of Reschid Pacha, the Emir Nizam of the Sultan; he had compelled many of the lawless wanderers that infest the frontier of a disputed territory to fix themselves in small villages, and to become cultivators, subject to laws, &c. We skirted the base of a low range of hills composed of impure limestone, called the Mountains of Nimrod, containing within the range a well, revered by the Armenians as that in which Job performed his first ablutions after his afflictions.

Policy of Reschid Pacha.

Arrival at Haran.

It was midnight when we arrived at Harán. On approaching it we passed over the dried beds of many irrigating canals, pointing out how extensively cultivation was once carried on in this now burnt-up plain. These canals must have formerly been supplied by the streamlets of the El-Belik, a river distant from Haran three or four hours, and which, after a circuitous course, pours its waters into the Euphrates below Racca. We could discern the dark citadel for some time before we reached the fosse and strong walls which surround the elevated ground on which the ancient castle stood. Its gloomy walls were composed of large basaltic blocks, and the archways and towers are still perfect. The remains of the ancient city are easily traceable, stretching under the castle. The buildings have been laid out at right-angles; many shattered portions of pillars lay scattered through the ruins, chiefly composed of marble and Egyptian porphyry. Our approach was announced by the clamorous greeting of numerous troops of dogs, which issued from the small huts here occupied by the poorer classes of cultivating Arabs. The construction of the huts was novel to us, being formed after the fashion of beehives, dome-shaped; this arises from the deficiency of wood in this district, the roof supporting itself without rafters. The cattle in the morning assembled round the Well of Abraham even as they did in

The citadel.

Ancient remains.

The Well of Abraham.

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the days of the Patriarch. The numerous troughs were supplied with water by the women, which did not fail to recall the beautiful descriptions of such scenes in Scripture.

The Melle-Kurds.

We were waited upon in the morning by messengers from Eiouaga, the powerful sheikh of the Melle-Kurds, who, with his flocks and herds, was consuming the scanty herbage before the troops of Reschid Pacha, who wished to scare the vacillating chiefs that occupied the frontier country. We received a pressing invitation to make his tents our own, but this we declined, as we were fully aware that his allegiance to the Porte was of a very dubious nature. After we left Haran we proceeded to visit the sheikh of the Guiess tribe; we found his tents occupying both banks of the stream of the El-Belik.

Sheikh of the Guiess tribe.

The Sheikh received us with much cordiality. We explained to him the nature of our journey: he had previously heard of our occupation at Bir, and of our intention of navigating the river; he did not at all relish the idea of our resolution of visiting the tribes as far as Deir. He stated that they neither would credit our assertions, nor comprehend our designs; that they were lawless, and addicted to plunder a small band such as our party then consisted of. We made him smile when we said our great Sheikh in England had given his orders, and that to hear was to obey. As he could not dissuade us from our purpose, he strongly insisted upon the propriety of our leaving the greater portion of our baggage under his care in case of being assailed and stripped, that we might have something to fall back upon, which proposal appeared unnecessary to us. After a night's sojourn in his tents, where we experienced all the hospitality so liberally given to the Arab character in books of fiction, we took our departure, previously presenting our host with a sword, which we hoped would prove a trusty recollection of his English visitors; this, with a few accompanying presents to the women, placed us on a friendly footing with the encampment.

Arab hospitality.

In accordance with our instructions, we visited the tribes that cultivate around Racca, and from thence by the streams of the El-Belik to the great river. We were detained some days on the left bank of the Euphrates in the vicinity of Racca, with a very numerous tribe of cultivators, residing during the summer in booths formed of the liquorice plant. We were anxious here

Visit to Racca.

to form one of our largest depôts of charcoal, as the mulberry, tamarisk, and walnut trees were very abundant. With a desire of creating a taste for English manufactures, we presented liberally, to the numerous sheikhs who visited us, Glasgow goods and Sheffield wares. We were much gratified to find that we could barter extensively for provisions and fuel.

The petty jealousies and broils which exist between these neighbouring tribes considerably interrupted the advancement of our party; and after having experienced one of these sallies, to which everyone is exposed who traverses this wild district, from a plundering band of the Aniza, who were engaged in a foray-party in the neighbourhood, we reached Deir.

Position of Deir.

We were much surprised, on approaching Deir, to find that it occupied so strong a position on the banks of the river. It is situated on the right bank, on a high promontory. Its walls are embrasured as well as the houses, which renders musketry very decisive. It has been for a long period of time in open rebellion against the Porte, as it is stated that the tax has not been paid since the time of Daoud Pacha. The land-approach to the city is through a winding road, narrow, and protected by the prickly-pear, which would make a very advantageous barrier against an assault of cavalry, the only species of troops of whose attacks they are at all apprehensive. The Sheikh Soliman received us with much kindness: he said he had letters from the English Effendi at Bagdad, Colonel Taylor, giving directions for the preparation of charred coal on an extensive scale; he seemed fully to understand the advantage that his people would derive from the great demand that would be made for fuel.

Sheikh Soliman.

Remnant of the Jews.

We were much surprised to find Jews very numerous here: we also learnt that others were dwelling with some tribes occupying the banks of the Khabour, the scene of Ezekiel's prophecies, as well as at Kahab, the extreme boundary of Solomon's territories, which is in the neighbourhood of Deir. In conversing with Sheikh Soliman, we found him a shrewd and intelligent man; he stated that his tribe was very numerous, and that it was frequently engaged with bands of the Aniza, that come scouring the country levying contributions on the cultivators. He said that Ibrahim Pacha, as well as the Porte, had each demanded taxes from him, and as

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heretofore neither of them were able to enforce it, he had thus far resolved not to pay either; but that as a messenger had lately come down from Ibrahim Pacha, demanding immediate payment of the tax, and that as Ibrahim had the capability of enforcing it, he thought he had better proceed with us to Aleppo, and enter into terms with the Pacha. He proposed taking 200 spearmen with him, as a protection to the whole party against the plundering hordes of the Aniza.

Commotion in Deir.

On the morning proposed for our departure, we were surprised to see the city in a tumultuous state of commotion—the men bearing arms, and forming themselves into bands, the women singing war-songs. On enquiring, we found that a rumour had just reached that a band of Aniza had fired one of their dependent villages, and the party then forming were preparing to repulse them. We received invitations from every side to join them, to which we acceded, as we were anxious to witness their rude mode of warfare. We proceeded out of the city amidst the acclamation of its rabble population, and never did Falstaff lead on a more motley band, armed with spears, curved scimitars, long rifles, matchlocks, shields, and maces; these they flourished in a most grotesque style. In the midst of their excitement some unhappy fugitive arrived, bearing the intelligence that the troops that had attacked the villages were the Egyptian Bedouins of Ibrahim Pacha, who had unexpectedly crossed the desert from Damascus, and come down to enforce allegiance. The scene was now reversed: our brave men-at-arms returned to their houses, and a deathlike stillness prevailed through the city instead of bustle; all were supplicating us to intercede with the Egyptian general. The armed men fell back, and a long retinue of priests and sheikhs accompanied us as suppliants to the burning villages.

A rabble band.

A scene of carnage.

After three hours' ride, we arrived at the scene of action: it was a hideous carnage. The village was large, fortified by mud walls, and the greater portion of it in flames; a sharp fire was still kept up by the besieged; after a protracted battle, the wretched survivors attempted to escape by the river, the only outlet left to them. Here the General had placed a strong body of Egyptians, who were engaged in cutting down the fugitives, as they fell into their

hands, without mercy; neither age nor sex protected them. The object of this severity was to strike terror, as the Egyptian had not troops sufficient to defend himself, were the Arabs to have risen *en masse*. We were enabled to negotiate successfully for our suppliant friends, and after a night spent amongst the Egyptian troops we proceeded to Deir, where we were received by long trains of women and children, singing songs to greet us on our return.

Our greeting at Deir.

As we had accomplished the great object of our Expedition, in having arranged the depôts of charcoal on the left bank of the river, and having also cultivated a friendly feeling with the Arabs residing on that side of the Euphrates, as well as having distributed English manufactures amongst them, we were now prepared to follow out the rest of our instructions—viz., to proceed up the right bank, visiting the various tribes, as we had done on the other side of the river. We greatly reduced the number of our difficulties by receiving from the Egyptian general a 'tuskarév,' or order, stating that he would require, by the heads of sheikhs of tribes, that we should receive no molestation on our return. This produced a very favourable reception from the cultivators occupying the skirts of the jungle.

'Tuskarév' from the Egyptian general.

In our conversation with the General, when he expressed himself astonished that so small a party should have had the rashness to penetrate so far amongst so wild a race, we mentioned to him the skirmish that we had had at Zelebi (I believe that was the name of the place); he replied that he would require the Sheikh's head, and appoint another chief in his place. We left him much pleased with his courteous affability towards us, although we could not approve of the murderous policy which had caused the blood of his victims to flow as water—but the dark parts of the earth are the habitations of cruelty.

Our success, in our intercourse with the tribes occupying the right bank of the river, was greater than we had reasons at first to expect. Cotton, indian-corn, and rice are cultivated here. The tribes are numerous, and say that they are able to repel any attacks of the Aniza. They were much pleased with the English manufactures, and we could not but think, during our sojourn among their tents, that the day might not be very

Products of the riverain.

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far distant, when, under the protection of England, these almost unknown people might be engaged in cultivating indigo, coffee, sugar, and silk, as the mulberry-tree is indigenous here.

Return to Bir.

We returned to our encampment at Bir after a circuitous route of 900 miles, having much cause to be thankful for the success of our dash into savage life. Already had a report reached Colonel Chesney that his party had fallen victims to Arab treachery, and our return was hailed with universal joy. It was sunset when we arrived at the port, and, strange to say, the last notes of the English national air were the first to salute us on our return.

CHESNEYA EUPHRATENSIS.

APPENDIX VI.

EXTRACTS FROM A REPORT OF AN EXCURSION IN THE ARABIAN DESERT (1836).

BY THE LATE JOHN WILLIAM HELFER, M.D.

On board the 'Euphrates' Steamer, March 20, 1836.

Reasons for visiting the Arabian Desert.

THE reasons which induced me to visit these parts have been—1st, to examine the scarcely-known Lake El-Malak, which furnishes a great part of Syria with salt; secondly, to examine the basaltic mountain-chain which forms, in the middle of the plain, a separate elevated range; and thirdly, to procure specimens of ornithology, entomology, and botany for the Euphrates Expedition.

Country from Aleppo to Sfiri.

Leaving the olive and fig gardens, which extend about an hour southwards from Aleppo, by degrees all trees cease, and not even a bush is to be seen; we then traversed a gradually elevated, rocky tract of country, and descended into a plain which appears to lose itself in the skies. The extreme uniformity of the scene was only varied by three or four of those small, obtuse, conical hills so frequently to be met with in Syria, on whose lowest part, at a distance of six hours from Aleppo, is to be found the salt-lake El-Malak.

Salt-lake El-Malak.

It begins about an hour southward from the village of Sfiri, and at this season is considerably larger than in summer. A small rivulet, which rises about an hour northward from Sfiri, flows into the lake, and wanting a sufficient fall forms several lagunes, which, increased by the heavy winter rains, have now covered a great extent of marshy land, the elevated spots of which are filled with *Juncaceæ*, but are entirely destitute of high grass or *Arundinaria*, as are also the borders of the lake itself, which presents a most uniform aspect. Several small inlets are seen about half an hour from the shore; but a close examination of the lake was

Vegetation.

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impossible, it being inaccessible on account of the mud and morass, and this mournful solitude being destitute of any kind of boat or canoe.

Water-birds.

Great numbers of water-birds frequent the neighbourhood of the lake, but I had never in any place seen them so shy. On approaching, thousands of ducks and geese flew up with a noise not unlike remote thunder, and then retired into the middle of the lake, where they formed black moveable islands.

Circumference of the lake.

I cannot determine the circumference of the lake, as it now exceeds its natural borders perhaps more than half, but I was informed by the Arabs that at the present season it is about a day and a half. The water is somewhat bitter, and contains now but an inconsiderable quantity of salt particles, the method of procuring which is very simple. The water, evaporated by the summer heat, retires, and in those places the pure salt crystallises; it is from thence collected, and conveyed on camels' backs into the different parts of Syria.

Procuring salt.

Origin of the salt.

Theory of the desert.

In my opinion a great part of the immense plain generally, but certainly falsely, called the Arabian Desert, was once covered with sea-water, upon the subsidence of which the lowest parts of the land thus left dry remained for centuries impregnated with concentrated salt particles. This is the case with the Lakes El-Malak, Geboul, and several others still less known. The quantity of water which accumulates during the winter dissolves a portion of the salt, which afterwards in summer evaporates; this, at least, appears to me the most simple and natural explanation.

Plain from Sfiri to the mountains El-Amri.

A beautiful fertile plain extends towards the basaltic mountain-chain called El-Amri. On leaving Sfiri all cultivation ceases; but the numerous ruins of villages prove in how much better a state this country was at no very remote period. Vegetation begins to revive; numerous bulbous plants, whose existence a few weeks before was not suspected, raise their heads, but not a single species of the phanerogamous class has yet been in bloom.

Vegetation.

Basaltic mountains.

An entire system of basaltic rocks has been raised, no doubt by one of those volcanic eruptions which, from the first historical times, has been so frequent in Syria. Like all basaltic mountains, it is based on chalk, and forms narrow perpendicular valleys, with cliffs on all sides, and blocks of all

Drake del.
TETRADICLIS CASPIA.
CRYPTADIA EUPHRATENSIS.

sizes scattered in every direction. There is also here an entire want of water, which produces a barrenness greater than I ever witnessed; not a shrub and, in many places, not a blade of grass was to be seen; it was seldom even that the black stones were covered with the *Lecanora* or *Parietaria*.

Barrenness of the country.

A plain, in some places of three hours in breadth, lies on the tops of these mountains; the sole inhabitants are the great yellow hyena, one of which we wounded, and numbers of wild boars. It seems at first extraordinary that an animal which is generally supposed peculiar to large forests and morasses, should be found in so barren a country; but he finds an aliment adapted to him in the bulbous plants, which are perhaps nowhere so abundant as here. The ground in many places is literally ploughed up by these animals in seeking their food, yet we saw very few of them.

Wild boars.

I spent the night in a cave to which I was conducted by my Arab escort, and was surprised to find it so neatly finished. On one side was a sitting-place, on another a fireplace with an opening for the smoke; on the other sides were a kind of sleeping-room, and a place for the animals. The cave is about thirty feet beneath the surface. The following morning I examined the place more minutely, and found that there existed an entire troglodyte village, consisting of about thirty of these caves close together and exactly resembling each other, capable of containing some thousands of men. When they were excavated I really do not know, but am inclined to ascribe their construction to a very remote period, even as far back as the time of the Grecian colonies in Syria; but they may have been made use of by the Mahomedans, whose indolence induces them to occupy and enjoy the labours of others.

Cavernous habitations.

When excavated.

On making enquiries of the Arabs who accompanied me, if there were anything of interest in the neighbourhood, I was informed that at about four hours' distance were the ruins of an ancient town never yet visited by a Frangi, and that in former times they themselves never ventured there, on account of the Aniza; but that one of them had been there last summer in search of wild potatoes (*Lycoperdon?*), and that the wild Arabs had withdrawn far into the interior.

Reports of the Arabs.

This report excited my interest so much that I resolved to

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proceed thither, our road lying over that high plain formed by the elevated basaltic mountain-chain. It was very interesting to observe, in the midst of this desolate country, the traces of a former high state of cultivation. We could distinctly see the terraces cut in the mountains, that places scarcely twenty feet wide had been cleared of all stones, and that long walls had been built, with small towers, pillars, and pyramids constructed of the stones cleared from the ground. These increased as we advanced, so that the mountain-chain may in former times have formed a considerable frontier or barrier.

Former flourishing state of the country.

Immense plain.

After traversing this high region for two hours, we descended again into an immense plain which extended on the other side. One part of the mountain range stretches out into the country in the form of a horseshoe, on the open side of which the Arabs pointed out to me a small hill, under which lay the town, which from their description had a greater circumference than the present Aleppo; and, indeed, all I saw convinced me I was approaching a place which had been formerly considerable.

Traces of an ancient road.

On the basaltic mountains I observed a few traces of a large ancient road; but on descending into the plain, we found it in good preservation, running in a straight line for at least two miles from the mountains towards the town, and on the side of it the deep bed of an ancient channel. We saw not a drop of water the whole way: from whence in former times the water flowed it is difficult to determine, but in Syria ancient channels without water are frequently met with.

Where is the water?

Town of Belet-Chan-Asra discovered.

On approaching the spot designated, I saw something like ruins, and soon afterwards I found myself in the middle of a large town, named by the Arabs Belet-Chan-Asra, perhaps never before visited by a European. It was completely in ruins, but having been in former ages demolished, or rather razed, it remained afterwards untouched; and thus possesses a higher interest than the old Hierapolis, out of which the Turks constructed their Membij, so that Roman temples and Moslem mosques are there seen together. That is not the case here; the plan of the whole town, and of every single house, can be easily traced; they are all built

TETARIS—A. parvi flora. B. capitata.

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of large basalt-stones, put together in a singular manner, hewn cuneiform, with the larger edge outside, and the interior filled with small stones.

Walls.

The whole town was surrounded by a wall, though several buildings and a considerable temple were situated outside. There were square towers erected at a distance of 50 feet from each other, with a sharp edge projecting outwards. I observed but two gates leading into the town, communicating with each other by a straight street, more than two miles in length. One gate is still partly visible, constructed of immense blocks, and the angles are easily to be distinguished; the opposite gate has fallen in, but one basrelief still bears the following Greek inscription:—

Gates.

. . . ΑΒΙΗΕΝΟCΙΡ . . . . . .
. . . ΤΟΔΕΤΟΤΙ : : ΟCΑΝΗΓΕΙΡΕΝ . . . . .

Greek inscriptions.

and on the other piece:

. . . . . ΤΟΝΕΥCΕΒΕC . .
ΕΥΕΡΓΕΤΗΝΚΑΙΝΙΚΗΓΡ . .
ΒΑCΙΛΕΑΚΥΡΙΕCΔΥΑΑΒ

Two buildings standing.

Only two buildings are at present standing, and they are of such a curious form that I cannot imagine for what use they were designed. One is a large vaulted hall, with an arched entrance, and windows on the opposite side; there are no other apartments near. The other was perhaps a bath, which appears to have been separated into different small apartments: an inscription I copied there will perhaps throw some light on the subject. It is a square tablet, fixed in the wall, but it is only partly legible:—

Inscription on a tablet.

+ΔΩΒΑΠΑ	ΤΡΙΚΑΙΟΙΟΥ
ΚΑΙΑΓΙΠΥ	Ε
VOIKAINTN	ΚΑ
	Α

A sarcophagus.

Near this inscription is a well-preserved sarcophagus. Both these buildings are at the south end of the town, near the gate, where is also a portico in a good state of preservation, some hundred feet in length, but so filled with sand that I could not proceed many paces.

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Castle on the hill.

One of those hills peculiar to Syria was within the walls at the south-west extremity of the town, and has served as a castle, or perhaps it was a temple: the walls are particularly strong, and occupied a considerable space; the front, looking towards the larger part of the town, is partly standing. There was a large square gate, surmounted by an immense basalt block, bearing an inscription, a part of which I was able to copy:—

ΦΡ
ΑΙΑΔ
ΥCΡΓЄΤ
ΗΙΚΟΥCΔЄC
ΥΠΑΙΧΟΥCΠΡΑΙ
ΛΥ:: ΗCЄΠΙCΚΟΠΟΙ
ΟΡΤΙΒΝΤΟΥϚΩЄΙΟΙ

Other inscriptions.

Wandering across the town, and looking for further information, I could gather no more than the following inscriptions:—

(*On a basrelief, belonging probably to a temple*).

ΑΤΟCΟC
ΤΑΥΙ
ΗΤΟCΗΝΩ

(*On a door of a private house*).

. . . ΟΙΚЄΗΛΠΙCΑΜ( )ΗΚΑ
ΙΡΟΗΘΟCΚΔΦΟ( )ΒΗΘ

I omit every hypothesis as to what age this certainly once considerable town has belonged, only I feel myself obliged to mention that I observed on two places the Maltese cross, which lets me make the conclusion that this town was in existence in the time of the Crusaders.

Ruined villa.

Among other ruins which I saw going back another way, I must mention those of a beautiful and grandiose villa situated in the middle of a mournful solitude, amidst the most picturesque forms of the mountains, giving a magnificent view on that immense plain. Besides this, I saw the foundations of two large buildings seeming to have been temples.

On enquiring whether they had seen any other ruins in the neighbourhood, they answered that, at a distance of six hours in the direction of Palmyra (which is only twenty hours from Belet-Chan-Asra) are ruins to a much larger extent.

Other ruins.

Though this was a great temptation, yet it was impossible for me to visit the place, being alone and without protection; but the success of the English steam-navigation on the Euphrates will soon open the country to the study of every branch of science, and history will particularly find on this classic soil an ample field for investigation.

APPENDIX VII.

REPORT OF THE CIRCUMSTANCES RELATING TO THE TRANSPORT (1835).

BY THE LATE MAJOR-GENERAL J. B. ESTCOURT.

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Affairs at Antioch.

June 28.—I set off from Suedia this day, to further the affairs of the Expedition at Antioch. Upon arrival I found that Mr. Eden, with his train of artillery waggons, was near the Gate of St. Paul at Antioch, having had great difficulty in getting through the town and along the road through the suburbs. Lieutenant Cleaveland I passed, with his artillery waggons, on my way to Antioch.

Finding that the road through the town was so bad, I directed Lieutenant Cleaveland to continue to Gūzelburj, and embark his plates there, sending them by water to Djezzer Hadid: the waggons to be crossed over to the opposite side, and drawn unladen to Djezzer Hadid also.

July 4.—All the loads and waggons were now collected at Djezzer Hadid.

Djezzer Hadid.

I had relied, when I determined upon the water-carriage from Gūzelburj to Djezzer Hadid, upon the report of Lieutenant Lynch, that the road from thence to Chindarees was practicable: before, however, allowing the waggons to proceed, I rode forward to reconnoitre, and found a part between the above places, in my opinion, impracticable for our waggons, laden with heavy weights, and drawn by weak untrained horses. I therefore directed the iron to be re-embarked and conveyed to Mūrad Pacha by water, and the waggons to go unloaded by the road, hoping that without loads they would be able to pass. In this determination I was obliged to depend again upon a report of the road from Mūrad Pacha to Chindarees, which represented it to be good.

Mūrad Pacha.

July 7.—The waggons arrived at Mūrad Pacha, but not the iron plates.

July 26.—The first caravan of artillery waggons arrived at Port William. They had been detained at the Sajūr for two days for want of men to assist the draft. It had required upwards of fifty men to help the horses during the journey. An Euze-Bashee accompanied the caravan, and was of great service, but he left at Hal-Oglu; and he being gone, the sheikhs and men left at the Sajūr refused to pass the frontier, declaring (what I do not believe to be the case) that the Sajūr was the boundary of Ibrahim Pacha's territory. Port William.

July 28.—Upon my return to Mūrad Pacha, I found that more iron had arrived from Djezzer Hadid.

August 7.—The waggons had arrived in the interval from my last visit here, and carried off all that they found. There were at this time, therefore, no stores at Mūrad Pacha.

I had for some days been occupied in repairing different parts of the roads, going to Killis for a cowass, or to Aleppo for an order that the Euze-Bashee should again be sent to me.

August 9.—At Antioch.

August 11.—At Mūrad Pacha, where I found stores, waggons, arrived at Chindarees with Eden from Port William; ten arabas, a long time promised for the service of the Expedition, and directed to meet me this day at Chindarees, did not come. Mūrad Pacha.

August 13.—At Antioch: more orders given for the arabas of the Pacha.

August 14.—Sent off planking, on horses, from Gūzelburj to Chindarees.

August 26.—Jones (seaman) and Harrison (artilleryman) arrived at Mūrad Pacha. Six arabas were immediately put in a state of readiness for oxen.

August 30.—Artillery waggons set off again. Eden had arrived, sick, from Port William, and having become much worse, could not return with the waggons, but was obliged to have himself conveyed to Antioch by water: he did not afterwards return to this duty. Mr. Fitzjames I had found sick at Gūzelburj, where I had gone, hoping that he would be able to succeed Mr. Eden in charge of the waggons. Sickness.

September 4.—The artillery waggons, which I had accompanied thus far, crossed the Sajūr, and set forward to Port William.

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September 9.—Having returned to Mūrad Pacha, and found many waggons loaded and ready, I arranged with the Euze-Bashee at Chindarees to send 60 oxen, all that could be got, by two days after, that being the earliest time by which they could be collected.

September 10.—Twenty-one camels loaded and sent off to Birejik; others directed to go to seek loads at Gūzelburj.

Camp at Suedia cleared out.

September 11.—Lieutenants Cleaveland and Cockburn arrived at Mūrad Pacha—the first *en route* for Port William, the latter to remain. Suedia was now cleared out.

The promised oxen did not come. Three waggons, with 46 oxen, set off in the morning; 20 more oxen came in late in the evening; and the artillery waggons arrived from Port William.

September 13.—A bedplate with the 20 oxen set off, but broke down at El-Hamam for the second time, the first time having been between Mūrad Pacha and El-Hamam.

The artillery waggons, now reduced to three, started again for Port William. At this time many more waggons were laden and ready to start, for which we could not procure oxen.

Killis.

September 15.—At Killis: procured from the Mutsellim an order to the Buoy Beys to furnish the oxen required.

September 17.—At Killis again, to meet the Euze-Bashee at the Mutsellim's, that he might answer to his accounts.

Causes of delay.

Now great difficulties started in the way of getting bullocks; fresh arrangements proposed, all creating fresh delays. A system of reference, at the last moment, from one authority to another, to avoid action. The Mutsellim of Killis refused to send oxen from his district into that of Antioch, in which Mūrad Pacha stood, but which was now for the first time made known to me. With many guarantees for the transport, as soon as the stores should arrive at Chindarees, the first point of the Killis district, the Mutsellim declared I must insist upon the Mutsellim of Antioch furnishing oxen to that place. He might have been right in this; but notice should have been given by the Government to the authorities to furnish the promised means of transport, and to order them, each authority, in his own province; instead of which I was allowed to apply from one authority to the other, until I found out

whose duty it was to furnish what I wanted. In this case, at this late hour, I was engaged with a caravan on its road to Port William; no other officer with me, and therefore unable to leave it. This caravan consisted of the keelsons and other timber. There were waggons waiting for oxen at Mūrad Pacha, which I hoped the Mutsellim of Killis would have provided; but upon my application I found myself referred to Antioch, occasioning a delay during the time I was necessarily occupied with the keelsons. Then the journey to Antioch—then the time required to collect the bullocks; besides which I knew, and represented to the Mutsellim, that the road between Mūrad Pacha and Chindarees passed over the plain of the Turcomans, who had no oxen accustomed to draught; and that as I had already endeavoured to procure oxen from them without success, I knew that considerable difficulty and delay would arise. The result bore me out in my expectations. But perhaps the Mutsellim was right in refusing to order oxen from his district to Mūrad Pacha. He, however, went further, and sent cowasses to the Buoy Beys, directing that they and their people were prohibited from hiring themselves to our service beyond the limits of the district. This fact I learnt afterwards from the Euze-Bashee.

Applications to the authorities.

September 22.—Having accompanied the waggons to Beglie, I returned to Antioch, and visited the Mutsellim, from whom I received an order to Achmet Bey, the Turcoman chief, to give oxen.

Return to Antioch.

I knew that this order would be ineffectual, and so stated to the Mutsellim; however, he declared the contrary, and would give no oxen.

September 23.—Sent Mr. Sader with the order to Achmet Bey, and, as I expected, he either could not, or would not, give the oxen.

September 25.—Again applied to the Mutsellim of Antioch, in person; and again received another order for Achmet Bey, with full assurances that he would himself send to the chief, and that oxen would now certainly be furnished.

Assistance given.

September 29.—Received an order from Ishmael Bey, through Mr. Werry, to whom I had applied for an order, also

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addressed to Achmet Bey, to the same purport as that from Antioch.

Also, from Mr. Werry, a letter for Ibrahim Pacha stating our difficulties. This I forwarded immediately through Antioch.

Difficulties attending the transport.

September 30.—Such proved to be the impossibility of obtaining oxen, notwithstanding the professions, promises, and orders of the authorities, that I this day found myself obliged to detain the artillery waggons, which yesterday had arrived for fresh loads, and to employ the horses in drawing to Chindarees the waggons which were waiting for oxen. Two boilers and one cylinder therefore set off to-day with a large araba.

Visit to Achmet Bey.

October 3.—Visited Achmet Bey myself with Mr. Rassam, to urge in person the necessity of complying with the demand for animals. He accordingly promised oxen for the next day.

October 4.—No oxen. Again went to Achmet Bey's tent, but found that he had gone to Antioch, to which place I immediately followed him.

Visit to Omar Effendi.

October 5.—Visited Omar Effendi. From him received positive assurances of assistance; that Achmet Bey would be compelled to provide oxen—if not his own, others; that if his own would not draw, he would be obliged to hire or buy those that would, or drag the waggons by men.

October 7.—The two boilers and cylinder, which had been drawn to Chindarees by the Expedition horses, to the delay of the artillery waggons, were furnished with oxen at Chindarees, and went forward with the Euze-Bashee.

October 15.—At Beglie the Buoy Bey promised me—in compliance with a strong order from Ishmael Bey, of which I was the bearer, and which was one of a long list of the same description of instruments—to give the next day 130 oxen at Tenekhalid, which should convey the caravans to Port William. With this assurance, I left the waggons under charge of Mr. Rassam, and retraced my steps to forward other stores.

Illness of Captain Estcourt.

On the road I was taken ill; and being relieved from the duty by Lieutenant Lynch, on October 22, at Killis, I went through Aleppo to Port William.

I found afterwards that the Buoy Bey of Beglie upon this occasion, as he had often done before, broke his promise, and neglected the orders he had received. The 130 oxen were not provided, and the boilers got no farther than the Sajūr for a considerable time.

The first waggon leaves Mūrad Pacha.

On September 12 the first waggon left Mūrad Pacha with oxen. From that time till the time I left the duty no animals could be procured from Mūrad Pacha to Chindarees. It is worth remarking how readily the strongest orders were given, and how daringly they were neglected.

J. B. BUCKNALL ESTCOURT.

APPENDIX VIII.

REPORT OF THE CIRCUMSTANCES RELATING TO THE TRANSPORT (1835-36).

BY THE LATE COMMANDER R. F. CLEAVELAND, R.N.

On board the 'Euphrates' Steam-vessel,
near Kara Bambuge, April 10, 1836.

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SIR,—In pursuance of your wishes, I send you a report of the proceedings of that part of the transport of the stores of the Expedition entrusted to my direction, and of the officers and men placed under my command for its accomplishment.

Landing of the stores at the mouth of the Orontes.

The landing of the stores, coals, &c. commenced on April 6, 1835, and was completed in fourteen working days by the boats of H.M.S. 'Columbine,' our own, and those of the 'George Canning,' on April 28. Considering the frequent difficulty experienced by the boats in crossing the bar of the Orontes, the distance of the ships from the shore, and exposed anchorage, I am of opinion that none but the most united efforts and perseverance of the officers and men of the 'Columbine,' and Expedition, could have accomplished it in so short a period.

First examination of the Orontes.

On April 5 I proceeded up the Orontes (by your order), to ascertain the practicability of using the river as a means of transport to Antioch. I was assisted in this service by Mr. Eden, and a boat under Lieutenant Thompson from the 'Columbine.' After two days' hard work in tracking, which only brought us to the Great Kara-Chai River (about one-third of the distance to Antioch), I came to the resolution of advising the abandonment of the river, from the following causes: firstly, the loss of time experienced by the boats in tracking up its rapid and winding course; secondly, the danger in passing up its numerous falls; and, lastly, the difficulty of tracking at all, in many places, from the steep and thickly-wooded banks.

The failure of the river as a means of transport, added to

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the determined opposition of Ibrahim Pacha, by the orders of Mehemet Ali, prevented the removal of any of the stores from Suedia until May 28, 1835—with the exception of a light caravan to Aleppo in charge of Mr. Eden, which reached its destination in safety, but without the sanction of the authorities. A second caravan was attempted in charge of Mr. Bell, but being passed by Ibrahim Pacha (who landed about a mile and a half from our camp, from the 'Nile' steam-vessel, on May 20), on his road to Antioch, his Highness directed the muleteers to turn back immediately, on pain of death in case of disobedience; and as the remonstrance of Mr. Bell produced no effect, this caravan was obliged to return.

Causes of the non-removal of the stores from Suedia.

However, the interval between the landing and May 28 was not by any means an idle one with us, although a most serious and injurious loss of time to the interests and plans of the Expedition, caused entirely by the breach of faith and opposition of the Egyptian Government; to overcome which, you, at the commencement, in company with Captain Henderson and the officers of the 'Columbine,' had an interview with Ibrahim Pacha at Tripoli; also in every other respect the most strenuous exertions were made to gain the consent of the Syro-Egyptian Government for the transport of the Expedition. To the same purport Captain Estcourt and Dr. Staunton also had an interview with his Highness at Tripoli; and on May 23, in company with Mr. Werry, I visited him at Antioch; but merely extracted from His Highness a promise, that if an order arrived from Mehemet Ali permitting the Expedition to pass through Syria, he would then put all the resources of the country at our command, and that the transport should be quickly finished; but until an order to this effect did arrive, it was his duty to oppose us in every way.

Measures adopted to gain the consent of the Syrian Government for the transport.

As I have already stated, the interval between the landing and May 28 was made the most of by us. All the stores, coals, &c. had been laid out and packed for carriage by camels, mules, or waggons; but as the opposition of the Pacha prevented the land-carriage, we again, on April 30, tried the Orontes with a raft, but failed in getting farther than the second fall, from the extreme rapidity of the current,

Time, how employed between the landing and May 28.

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Tracking.

which frequently pressed the raft entirely under water. The tracking was very severe work for our men, who were often carried back in five minutes by the current more than they had gained in an hour; but they bore it with that cheerfulness and good feeling that has so constantly attended their labours. I was assisted on this occasion by Mr. Charlewood, and cannot express myself too strongly in return for his unremitting exertions.

Second examination of the Orontes.

On May 2, by your wishes, I again proceeded up the Orontes with Messrs. Charlewood and Bell, to examine some of the worst-looking places as to depth of water, in order to determine on the practicability of getting the 'Tigris' up to the weirs near Antioch. Finding everywhere deep water, we came to the conclusion that if the 'Tigris' would steam nine or ten knots an hour, and steer well, she would ascend the river, assisted by warps over some of the falls. From this report, on May 6, you decided on setting-up the 'Tigris'; the same day a slope was cut down to the river, ways laid, and the 'Tigris' commenced. During the building the carpenters were employed constructing a waggon, the spare hands enlarging the creek near us for the reception of the 'Tigris' when launched.

Report and its consequences.

Mr. Fitzjames's departure for Scanderoon.

On May 7, Mr. Fitzjames set off for Scanderoon to join the surveying party under Lieutenant Murphy.

Launch and trial of the 'Tigris.'

May 23.—Launched the 'Tigris'; employed till the 29th in getting in her engines and boilers, intending her to carry a load of the ribs, &c. of the 'Euphrates' up the river. Between May 29 and June 3 made several trials with her, but never succeeded in reaching more than five miles up the river, from causes explained in my report of that date.

First message of Omar Effendi from the Pacha.

On May 30, Omar Effendi came with a message from the Pacha, stating that if he (Ibrahim Pacha) did not receive orders from Mehemet Ali within five days from that time, he would take upon himself the responsibility of allowing the Expedition to proceed to Bir, and that he would give the necessary assistance.

Second message of Omar Effendi from the Pacha.

June 3.—Omar Effendi again visited us, with a second message from the Pacha to this effect: that Mehemet Ali had sent his Highness positive instructions to allow the Expedition to proceed to Bir, and to render every assistance required of

him. This information, after the failure of the 'Tigris' on the river, decided on her being broken up, and prepared in eight sections for land-carriage on waggons made by our carpenters of the keelsons and other large timber.

Breaking up of the 'Tigris.'

June 4.—Lieutenant Lynch (who arrived the day before) visited the Pacha, made demands for animals for the transport, and men to repair the roads to make them passable for our waggons. The Pacha consenting to these demands, Lieutenant Lynch proceeded to superintend the repair of the road from Antioch to Birejik; Messrs. Fitzjames, Bell, and Sergeant Quin, the road from Suedia to Antioch. This service was extremely well performed by the latter officers, which, from the indolent habits of the natives, want of proper tools, the rough hilly ground, two rivers, and numerous streams (through which our road passed), made it a very arduous task, and one requiring great judgment to avoid the many obstructions presenting themselves. The road was completed about June 15.

Lieutenant Lynch's interview with the Pacha, and for what purpose.

Road-making.

On June 8, fifty camels arrived and were loaded with great difficulty, as the cameleers were very stubborn people, and insisted upon selecting their loads, and that only after a great deal of vexatious talking and grumbling.

First loading of camels.

Hired some native carpenters to assist in making waggons.

Carpenters hired.

June 12.—Two hundred bullocks arrived for the waggons, but after many fruitless attempts to make them draw, we were obliged to discharge them.

Trial of bullocks.

In consequence of the vague and unsatisfactory manner in which the Pacha's orders were carried into execution, from the unwillingness of the people to work, the stubbornness of the cameleers and muleteers, our work commenced very badly, and made it necessary for me again to see the Pacha, and state the general inattention to his orders. Accordingly, on June 13 and 14, I had interviews with his Highness, which were good in their results; producing an order for the Mutsellim of Antioch and Agha of Suedia to be in constant attendance on the work at our camp; an Euze-Bashee to assist the waggons on the road, and as many cowasses as we required; also a strong 'Boyardhi' to control the whole.

Inattention of the authorities to the Pacha's orders, and ill consequences.

My interview with the Pacha and its results.

June 16.—The Mutsellim of Antioch, Agha of Suedia, and several cowasses arrived, bringing with them 146 men to

Arrival of the Mutsellim of Antioch, &c.

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carry loads to Antioch; gave them the ribs of the 'Euphrates,' and sent them off. Loaded and sent off 60 camels during the day; the heaviest load was 600 pounds, but the generality much under.

Loading of camels.

June 18.—Not being able to induce the muleteers to put their animals to our waggons, came to the determination of purchasing horses. At our request the Mutsellim collected all the horses of the district, and, fixing the prices, we bought all those likely to answer for the waggons (none had ever been in harness), also some bullocks.

Purchase of horses for the waggons.

Commenced training our animals in the waggons; had much trouble with them at first, as they had never drawn before, but the attempt was altogether encouraging.

Training of animals.

June 19.—Mr. Fitzjames endeavoured to get on the diving-bell truck, loaded with sheets of iron of the 'Euphrates;' but after repeated trials was obliged to desist, as the oxen would not draw.

First attempt to send on a waggon, and its failure.

The Mutsellim collected 100 men for starting the artillery waggons in the morning.

Men collected to drag the waggons.

June 20, 3 A.M.—I set off in charge of the five artillery waggons, having Mr. Eden with me, and a party of our men under Sergeant Quin as drivers, and 100 countrymen for the dragropes. As the horses pulled badly, found we had not force enough for the five waggons; left the rear one behind, and put the men and horses on the remaining four. At sunset halted on the top of the first hill, encamped for the night, and paid the people. We only made five miles this day, having met many obstructions on the road, and the natives working very unwillingly, requiring constant beating and yelling to get them on.

Halt at sunset.

Mr. Fitzjames was employed during the day in bringing up the artillery waggon left behind by us. He had four horses and thirty men to assist with dragropes, and by great exertion made about three miles, bringing up for the night in a cornfield about two miles from us.

June 21.—Ninety-six camels were loaded and sent off to Bir by Mr. Charlewood; these wild cameleers kept the camp in a complete uproar while loading, by their scrambling for everything light and easy to carry; but, by dint of perseverance, were got off in the end with tolerably heavy loads.

Uproar of cameleers.

Artificers employed making waggons of all kinds, the spare hands laying loads for the camels.

Zigzag Hill, or Hill of Difficulty.

At 3 A.M. I started with the four artillery waggons, and arrived at the Zigzag Hill about nine o'clock. This hill was deservedly christened the Hill of Difficulty, as it always required all the tackles, anchors, screwjacks, and other purchases we could muster, to surmount it; in after-times with the heavy waggons, it has cost us days of the most indescribable exertion and fatigue, frequently not gaining more than a few feet in an hour; and the constant breaking of our tackling, chains, ropes, &c. in a scorching sun, made it alike trying to the patience and temper, as well as health, of our seamen and soldiers, who, although they suffered much in the latter, I am convinced were never equalled in their fortitude and perseverance by any other set of men.

Slow ascent of the hill.

After an hour's halt, ascended the hill with all our force on one waggon at a time. By 2 P.M. had them all up, but found we could not cross the rocky crest just beyond the hill, without an additional force on the ropes. Sent an order to Mr. Fitzjames to bring up his men and horses to our assistance. He was soon with us, and his aid as cheerfully given as it was useful to us. Got the waggons past this place by sunset, where we halted, encamped for the night, and paid the people, now 160 in number.

June 22.—Twenty-three camels were loaded, and sent off from the camp by Mr. Charlewood. Artificers employed in making waggons; spare hands laying loads for the camels.

At daylight I proceeded on with the four waggons, keeping Mr. Fitzjames's men and horses, as we had some very bad road in front. Mr. Fitzjames returned to the camp, thereby incurring your displeasure, which should more properly have fallen on me, as this change of plans was entirely by my directions, but at the same time made with the best intention.

Reach the Great Kara-Chai river.

About 10 A.M. we reached the Great Kara-Chai. The descent into the river being very rugged, steep, and winding, we could only lower down one waggon at a time, with only the shaft-horses in, and all the men on the drag-ropes behind; in lowering the second waggon down, it fetched way, and running into the bank badly wounded one of the shaft-horses.

The Lesser Kara-Chai.

At sunset arrived at the Lesser Kara-Chai, and found the

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descent as bad as at the other river, but the waggons were lowered down without accident. Halted here, encamped for the night, and paid the people.

Mr. Clegg, engineer, passed us to-day on his road to Bir, in charge of 75 camels. Mr. Fitzjames set off and reached the first hill with one waggon; also Mr. Rassam with several small ones.

Arrive at Plain of Antioch.

June 23.—At daylight I proceeded on with the four artillery waggons, and, after a hard day's work, at sunset, reached the plain about three miles from Antioch; encamped for the night, and paid the people. I went down to Suedia to explain what we were doing to you, and to clear up the change of your arrangements made by me on June 21. I returned to the waggons during the night.

Fifty camels and twenty mules were loaded and sent from the camp by Mr. Charlewood. The cameleers were the most troublesome, boisterous set we had had anything to do with yet.

Mr. Fitzjames and Mr. Rassam, having 103 men and 20 bullocks, got their waggons to the top of the Zigzag Hill with great difficulty, lightening the waggons, and carrying portions of the loads up the hill by hand; nearly killed one of the natives by the falling of a plate of iron.

June 24.—Proceeded on with the waggons at daylight: at 9 A.M. arrived and encamped at the Bridge of Antioch. I went on to examine the road, to the village of Gūzelburj, about one hour up the right bank of the Orontes; found the road ran through the plain a few yards from the bank of the river, and to be very good, with the exception of one place, afterwards repaired by Lieutenant Murphy.

Bridge of Antioch.

Mr. Charlewood sets out with a raft up the Orontes.

This day Mr. Charlewood made another attempt with a raft of keelsons up the Orontes, having four of our men, and 21 natives: the tracking, as usual, was extremely difficult and dangerous, the raft often capsizing and diving completely under water. It was very hard work for the officer and his men, who, continually wet and burnt up during the day, were cold and comfortless on the banks of the river at night. However, by the most praiseworthy perseverance, they reached within a mile of Antioch on June 28, when the natives, tired of their bargain, and disgusted with the hard work, deserted

them: and not being able to get any assistance from Antioch, Mr. Charlewood and his party returned to Suedia, having left their raft in charge of a native living on the bank of the river. The raft could not be hauled over some of the falls, and was therefore repeatedly taken to pieces, dragged round by land, and launched again on the upper side of them.

June 25, 6 A.M.—I left Mr. Eden in charge of two waggons at the bridge, to await the arrival of Mr. Fitzjames with his; I went on with the other two (having increased their loads from Mr. Eden's waggons) to the village of Gūzelburj, discharged the loads, and proceeded back towards Suedia. At sunset halted, bivouacked for the night in a cornfield about four miles from Antioch; found near us Mr. Fitzjames and his waggons. During the night the fieldmen arrived in charge of two artillerymen.

Gūzelburj.

June 26.—At daylight I proceeded on, and reached the Hill of Difficulty at 3 P.M. Found collected here loads by Captain Estcourt and Mr. Rassam, in a number of two-wheeled 'arabas,' a species of waggon exceedingly well-adapted for these rough and hilly roads: they resembled the wine-carts of Spain and Portugal, and were drawn by from four to twelve oxen; they usually carried from 10 to 16 cwt., but frequently broke down with these loads.

The Hill of Difficulty.

Leaving Sergeant Quin to load the artillery waggons from the materials on the hill, I proceeded on to the camp to report my arrival to you, and joined the waggons again during the night, ready for starting in the morning.

Mr. Fitzjames reached to-day, with his waggons, within a short distance of Antioch.

June 27.—Having collected 60 natives to man the drag-ropes, at daylight I started with the two artillery waggons for Gūzelburj; arrived there on the morning of June 29; unloaded the waggons, and crossed them and horses, in the ferry-boats, to the opposite bank of the river; bivouacked here for the night.

This day Omar Effendi visited and informed Lieutenant Murphy that the Pacha had ordered him to remain at Antioch until the removal of the stores of the Expedition from Suedia to the next depôt was completed, and to give every facility to that effect.

Visit of Omar Effendi to Lieutenant Murphy.

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June 30.—At daylight put the loads brought by the two waggons into six of the river-boats, and ordered them up to Djezzer Hadid; this done, cut across the fields with the two empty waggons into the Djezzer Hadid road. Arrived at the bridge at 11 A.M., and sent the horses back to assist Mr. Eden in getting up with his two waggons, now joined by those of Mr. Fitzjames, who arrived at Antioch on the morning of the 27th.

Mr. Eden's passage through Antioch.

Mr. Eden passed over the bridge and through Antioch, having about 60 of the townspeople to drag the waggons: they were a very riotous, unruly set; it was with great difficulty he got out of the town and suburbs, and finding the road very bad for some miles beyond, Mr. Fitzjames was set to work to repair it, by Captain Estcourt's order.

Repair of road from Bab Paulos to Djezzer Hadid.

Mr. Eden arrived at Djezzer Hadid on July 1. Employed ourselves in getting the waggons over the bridge. During the day four boats arrived from Gūzelburj, reporting the other two to be on their way. In the afternoon Captain Estcourt passed by on his examination of the road from Djezzer Hadid to Chindarees. On his return, he pronounced this part of the road impassable for the loaded waggons, and consequently determined on taking up the following line of transport—from Gūzelburj up the Orontes to the Kara-Sū, by which river the boats were to enter the Lake of Agha Denghis, and work their way across to Mūrad Pacha. This arrangement was good for many reasons; it gave us 18 or 20 miles of easy water-carriage in the direction of Bir, and the stores were landed on a good road within six hours of Chindarees; also a considerable gain in point of time, as the waggons depositing their loads at Gūzelburj returned so much the sooner for fresh loads, while the *hako* (waggoner) kept the waggons supplied from Mūrad Pacha to Bir—thus making our progress constant along the whole line.

Captain Estcourt's examination of the road from Djezzer Hadid to Chindarees.

Change of the line of transport.

Depôt at Gūzelburj.

July 2.—Mr. Fitzjames took charge of the Gūzelburj depôt, and received the first division of arabas and small waggons from Suedia.

Between July 2 and July 5, by Captain Estcourt's order, I sent all the loads we had brought to Djezzer Hadid down the river, and so on across the lake to Mūrad Pacha, to which place Mr. Eden proceeded (by the old road) with

the empty waggons, picked up his loads, and made the best of his way to Bir.

I was ordered back to the camp at Suedia, and on my return, on the night of July 6, found Mr. Charlewood bivouacking on the top of the Zigzag Hill, having arrived there that evening with a section of the 'Tigris' and flat-boat on wheels. The countrypeople for the dragropes and oxen had been collected with great difficulty, and took every opportunity of deserting. The waggons had also broken down repeatedly, causing many vexatious delays.

Vexatious delays.

July 7, 6 A.M.—I arrived at the camp, and reported myself. Found the artificers hard at work making waggons.

July 8.—Sent off three arabas with engine-work, and a caravan to Birejik of 36 mules, 24 carrying the ammunition. Struck the store-tent, and sent the observatory and a round tent with the caravan. Mounted the first of the 'Euphrates' boilers, and took it into the road ready for starting.

Caravan to Birejik.

July 9.—Sent off 20 laden mules to join the others, and a party under Corporal Clark to take charge of the whole. Sent two tents with them. Artificers working hard and in extra hours to complete the ironwork of the waggons before starting for Birejik. Sent carpenters out to repair the broken waggons on the road, and by them some money to Mr. Charlewood, who was still working his way with the section and flat. Three section waggons being completed to-day, mounted the sections, and got them into the road ready for starting.

On July 10 you left for Birejik, giving me instructions as to the method of carrying on the transport, and which to the utmost of my power, and as far as circumstances would permit, were put into execution.

Colonel Chesney's departure for Birejik.

There remained at the camp at this time the following heavy weights:—

Stores at Suedia on July 10.

5 Boilers of the 'Euphrates.'
3 „ „ 'Tigris.'
14 Half-sections of the 'Tigris.'
2 Cylinders and 2 bedplates of the 'Euphrates.'
2 „ „ 'Tigris.'
1 Diving-bell.
1 Flat-boat.

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Also about 100 loads of plank and beams. Sent you a van by horses to Güzelburj, 150 camel-loads of coal, and other things to Bir, and 25 araba-loads of machinery to Güzelburj.

Transport of the heavy weights.

The heavy weights were transported to Güzelburj on waggons made by our carpenters and smiths of country timber, and keelsons, beams, and long timber of our own. Our carpenters and smiths are entitled to the highest credit for their energy and unwearied labours: they had always to work extra hours, and frequently to make journeys from the camp to the road at night for the repair of the broken waggons. They constructed three waggons for the boilers, five section and four timber waggons, three small ones made of gun-slides, and other small wood; also 15 two-wheeled arabas. Some sledges were made, but did not answer, excepting that, when empty, they were useful in training our oxen. From Güzelburj the stores were tracked up the Orontes in our two flats, and four other boats; also a raft of pontoons was used occasionally, and four or five native boats kept constantly going. From the Orontes they passed into the lake by the Kara-Su, and passed on to Mürad Pacha, where they delivered their loads.

Raft of pontoons.

In officers and men, you left me all our small means could afford—indeed, all I asked for and felt entitled to—to accomplish my task. The officers were Messrs. Charlewood and Fitzjames; Mr. Rassam, interpreter; and about the middle period of the transport, Dr. Staunton, leaving for Birejik, was relieved by Mr. Ainsworth. The following are the names of the artillerymen, carpenters, seamen, &c.:—

List of men employed on the transport from Suedia to Mürad Pacha.

Artillerymen.	Seamen.	Maltese.
Job Vains, smith.	Wm. Wright.	Michaele.
Edw. Harrison, smith.	Peter Laurie.	Briffa.
John Waddle.	John Hunter.	Swuroff.
	John Clark.	Shicluna.
Carpenters.	Fran. Hoffman.	Greeks.
Wm. Frew.	John Brown.	
Wm. Jackson.	D. Sucho.	
Wm. Watt.	Thos. Jones.	

The removal of the stores from Suedia to Güzelburj

was effected by myself, Mr. Charlewood, and about three-fourths of our men—the remainder being with Mr. Fitzjames, receiving the stores at Gūzelburj, and taking them across the lake to Mūrad Pacha; but it frequently happened that our waggons broke down near Antioch, in which case they were left to Mr. Fitzjames to repair and get on.

Assistance of the medical officers.

Dr. Staunton and Mr. Ainsworth had, in their turn, ample employment, as our sick list generally exceeded half our numbers; but their aid was always kindly given when required, and our work often essentially served by their assistance.

Sickness of the officers.

Mr. Charlewood and myself were alternately laid up by hurts for a few days, and of course the work then devolved on the one. On August 25 Mr. Fitzjames was laid up with a brain-fever from exposure to the sun, and did not recover from the effects of it until September 30. Mr. Charlewood then took charge of Gūzelburj, and the road and camp fell to me.

Evacuation of the camp at Suedia, and arrival of the last heavy waggons at Gūzelburj.

Having cleared and given up the camp at Suedia, on September 7 I arrived at Gūzelburj with the last of the heavy weights, two boilers, flat-boat, and diving-bell. I here received a letter from you, ordering me to proceed to Bir, immediately; and on September 9, having made all the necessary arrangements with Mr. Charlewood for bringing up three broken waggons and some plank remaining on the road, also the remainder of the men and stores from Gūzelburj to Mūrad Pacha, I proceeded on to Birejik, and arrived there on September 12.

My departure for Birejik.

Transport, how carried on.

During the transport from Suedia to Gūzelburj, the small arabas were generally taken by the countrypeople for a sum of from 180 to 250 piastres, and seldom broke their contracts except by the breaking-down of the waggons; but the heavy waggons always by our people, and under the superintendence of myself or Mr. Charlewood. A division of eight or ten waggons, on an average, took 11 days in reaching Gūzelburj, and usually had from 60 to 150 bullocks, and upwards of that number of men to man the dragropes; our men guiding the poles, fixing the tackle-chains, ropes, screw-jacks, anchors, and other contrivances, by which they were

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got along, hauled over hills, through swamps, and righted when capsized.

Difficulties of transport.

The difficulties we contended with were all but insurmountable, the first and most vexatious being either from the duplicity and insincerity in the professions of Ibrahim Pacha, or the almost utter want of attention in the under-authorities to his orders, to facilitate the transport of the Expedition; either of these causes was sufficient, and did produce the most destructive delays in getting the stores from Suedia to Birejik, and subsequently in the descent of the Euphrates. To lessen these ill effects (for they were never completely removed) we were kept in constant communication with the Pacha.

Officers of the Pacha.

The Mutsellim of Antioch and Omar Effendi were certainly the two most zealous of the Pacha's officers in our cause, but even they did not by any means keep pace with our expectations.

The people of the country.

Secondly, the countrypeople never worked willingly for us; all was done by force, and they deserted with their cattle whenever an opportunity offered, leaving us often in the most critical situations.

Obstacles *en route*.

Thirdly, the steep and rugged roads in many places, the two Kara-Chai rivers, numerous streams and swamps, could only be passed by the waggons by the utmost exertions and most incessant labour of the officers and men who accomplished it.

Effects of the climate on Europeans.

Fourthly, the extreme heat of the days was very distressing to our people: none escaped sickness, and one poor fellow (James Brown, seaman), when just within sight of Antioch on July 23, with the second division of heavy waggons, was attacked with brain-fever, and died in a few days.

Necessity of ready cash.

Again, our supply of money was very irregular, causing frequent delays, as nothing could be done except by payment on the spot; the Syrian people, as far as we were concerned with them, from the highest to the lowest, being 'completely destitute of all principle of honour or good faith in any of their dealings.'

Payment of the natives.

The country people employed by us were paid, each man, three piastres a day, a sheikh ten, a cowass or inferior officer

from eight to twelve; but for good services they frequently received presents of various kinds.

Lastly, the continual breaking-down of our waggons brought us the most indescribable troubles and disappointments.

Conclusion of the first part of the transport.

This concludes the report of the transport, from Gūzel-burj to Mūrad Pacha, that came under my superintendence; and as I have been favoured by your approbation of my exertions, I naturally feel doubly indebted to those officers and men, who, placed under me, have on all occasions so zealously and successfully devoted their whole energies and efforts to its accomplishment.

I have the honour to be,

Your obedient humble servant,

R. T. CLEAVELAND, Lieutenant R.N.

Colonel Chesney, R.A.,
Commander of the Expedition.

APPENDIX IX.

SUMMARY OF JOURNAL (1835), BY ACTING LIEUT. (NOW CAPTAIN) E. P. CHARLEWOOD, R.N.

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April 27, 1835.—At last the 'George Canning' transport, at anchor off the mouth of the Orontes, was cleared out. Providence had so far been favourable to our enterprise; for, in spite of the dangerous surf and shallow bar across the mouth of the river, all our stores were safely landed, and not a life lost in this hazardous work. Possibly years hence we may live to see a harbour constructed at the entrance of this river.

Scene in camp.

Our camp was indeed a busy scene. A number of the men were selecting and laying out camel loads; but the principal work was the preparation for the building of the smaller steamer (the 'Tigris'), in consequence of the refusal of Ibrahim Pacha to allow us to proceed into the interior towards the Euphrates river. Our Colonel was determined to show that we were not to be stopped; he proposed, therefore, to put the 'Tigris' together, with the view of conveying our stores up the Orontes to Antioch, or beyond it if practicable.

April 28.—We had not yet finished with the surf on the bar of the river. Our consort, H. M. S. 'Columbine,' had sent her launch for water; the boat was returning heavily laden at 4 P.M., through this dangerous surf, and we on shore were watching her closely. As she approached the surf, some heavy seas rolled into her, and in a short time it was evident she would be wrecked. Boats were instantly sent to the rescue, and the whole crew safely brought on shore. My boat being the smallest was soon swamped, and the crew sent sprawling into the surf—fortunately, however, within reach of the launch, which was then grounded on the bar.

Dangers of the surf.

April 29.—The Colonel having ordered Cleaveland and myself to survey the Orontes, with the view of ascertaining how far it was navigable for the 'Tigris' steamer, we prepared a raft, and started at 10 A.M. with fifteen men, two boats, and ten days' provisions.

Prepare a raft.

The Orontes winds through a level plain for about 4½ miles. It then enters a gorge in the mountains, and becomes a series of rapids until it reaches Antioch, a distance of about 35 miles by the windings of the river. The entrance of this gorge is marked by a perpendicular red-coloured cliff, about 100 feet high. We completed our survey to this point satisfactorily, finding the river very rapid—four miles an hour—and an average depth of nine feet. Our raft proved a serious impediment, the boats being unable to tow it after the first two miles; and tracking became exceedingly difficult, owing to the brushwood growing upon the banks. After considerable toil, we succeeded in advancing a quarter of a mile up the gorge beyond the red cliff; here we found the river narrowed to about thirty feet, and rushing down between the rocks in a perfect torrent, rendering it quite impracticable for the raft. Cleaveland therefore decided to return at once to the camp, and, if necessary, proceed with the survey without the raft or boats.

Survey of the River Orontes.

The Colonel being anxious to obtain a further survey of the river, and especially with the view of ascertaining whether there was a sufficient depth of water in this torrent for the steamer, we (Cleaveland and myself) started early in the morning of May 2, with the necessary lead-lines, &c., for sounding the torrent. On reaching the surface of the rock on the left bank of the river, and overhanging the cataract, we set to work with our lead-lines, &c., but in vain; the current was too rapid for the lead to reach the bottom. What was to be done? To return to the camp and report a failure to the Colonel, who allowed nothing to be impossible, was quite out of the question. We therefore decided to take it in turns to jump in! and if the bottom could not be reached with our feet, it would be a clear proof there was sufficient water for the steamer. Accordingly, Cleaveland, who was my senior officer, and claimed his right to take the first leap, stripped off his clothes, and, a long and light rope

Sounding the torrent.

Cleaveland's first leap.

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having been secured round his waist, he leaped into the torrent, rushing past some twelve feet below where we were standing. By keeping his arms stretched out horizontally, his head did not go under water as he was dashed down the fall. Fortunately, also, I veered out the rope, so as not to check the speed with which he shot past me, so that, about forty yards lower down, he was tossed into an eddy-current close to a sandbank, where he safely landed. My turn now came; and, having made every preparation, I leaped in, holding my arms up in a line with my body. I imagine that by this means I must have gone down some feet under water. Consciousness must then have almost entirely left me. I was aware that I was under the water, and admiring it as it rushed past sparkling like diamonds. This sensation, which was more one of pleasure than of pain, is all I can remember, until I awoke to the fact that I was lying half out of the water, with Cleaveland standing over me in ecstacies at finding I was not drowned. It appeared that when I went under water, Cleaveland became alarmed, and tried to pull me up as I passed down the torrent; but the more he pulled, the deeper I seemed to be forced down, and rapidly shot across the stream, first to one side and then to the other, the rope all the time running out of his hands at an alarming rate. At last, either from its breaking or the end passing out of his hands, I came to the surface, and was fortunately shot upon the bank where I found myself, Cleaveland having hurried down to prevent my floating off again.

Under the water.

Nearly drowned.

Whether I had felt all that a drowning man would suffer, it is impossible to say; my impression is, that the water rushing past had stunned me; at all events, I was soon quite recovered, and neither Cleaveland nor I felt any bad effects from our novel and rash method of sounding a torrent. We returned to the camp on May 4, satisfied that the steamer could be of no essential service in transporting stores more than four miles up the Orontes.

The following day (May 5), news having arrived that Ibrahim Pacha had taken a decidedly hostile step by turning back 100 camels and 50 mules, hired by our agent in Aleppo to convey part of our stores to the Euphrates, and Colonel Chesney not being a man to stick at trifles, orders were

Hostile step of Ibrahim Pacha.

issued by him to construct the 'Tigris' steamer, with the ostensible view of transporting our stores by the Orontes river as far inland as practicable, but principally I suspect to impress the Pacha with the fact that, having landed here, nothing should deter us from carrying out the object we had in view.

A slipway constructed.

From this date we commenced our operations, first constructing a slipway for the 'Tigris,' and collecting together her iron ribs and side-plates. By 6 P.M. the bottom-plates were all in their places ready to be riveted, and for many days afterwards the rivet-hammers were at work from daylight to dusk.

Various attempts had been made to obtain baggage animals, but in each case Ibrahim Pacha's officers had persisted in preventing their proceeding to our camp. On May 22 the 'Tigris,' or rather her iron shell, was pronounced fit to swim, and she was successfully launched into the river in the presence of a large concourse of Syrians and Arabs, whose exclamations of 'Mashallah!' at seeing iron float on water, were very amusing. Mrs. Barker, the wife of Mr. Barker, late Consul-General at Alexandria, christened the vessel with a bottle of Lebanon wine.

Launch of the 'Tigris.'

The engines were now fitted in her, and by May 29 she was ready for a trial-trip. The less said about these trial-trips the better, for they were far from promising, either with reference to speed or steerage; but they nevertheless produced, to the fullest extent, all the good we hoped for. Ibrahim Pacha evidently had at last discovered we were not to be stopped, and on May 30—the day after our first trial-trip—changed his tactics, and sent us an intimation to the effect that he would not only allow us to proceed, but promised to give us every possible assistance.

Her trial-trip.

Change in Ibrahim's tactics.

Activity in camp.

The greatest activity prevailed in our camp upon the arrival of this news. The 'Tigris' was gradually hauled up and taken to pieces in sections, commencing from the bow. Carpenters constructed flat platforms on strong axles and wheels for the conveyance of the boilers, diving-bell, &c., each of these articles weighing between $2\frac{3}{4}$ and 4 tons.

The bedplates of the engines of both steamers were also fitted with axles and wheels for travelling, and indeed all

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sorts of ingenious contrivances were hit upon. Our two large flat-boats, built to convey our boilers through the surf on the bar of the Orontes, were fitted like waggons, but with the addition of large masts and sails to help them along when the wind was fair. Horses and oxen were broken in—or rather pretended to be broken in—by a knowing old artillery-man, who at last was punished so severely by an old bull, which rushed at him and damaged his ribs, that poor Macdonald was obliged to abandon his breaking-in for a less dangerous occupation.

Flat-boats fitted as waggons.

Road-making.

I must here mention that for a considerable length of time a large party had been occupied constructing a road over the very difficult country between the camp and Antioch, a distance by road of about 23 miles; the remainder of the country to the Euphrates (altogether about 140 miles from the camp to Birejik) being comparatively easy to travel over. Up to this time all were in good health, notwithstanding the weather, which had been very variable, generally very hot with heavy thunderstorms at night, the rain pouring through our tents and soaking our beds and clothing.

The bar of the Orontes.

On June 4 the bar of the Orontes was again a source of anxiety. Two Turks attempted to cross it in a small boat, and were instantly capsized in the surf. Seeing that their case was hopeless, unless an attempt was made to save them, Noffman (an able seaman) and I obtained a long line and proceeded to the nearest point of dry land, and then waded out to the drowning men, who were fast drifting out to sea in the current of the river; fortunately we reached them before they had drifted beyond the full tether of our rope, and we were all pulled on shore together. I do not know whether the gratitude of a Turk is proverbial, but in this instance these fellows, on being safely landed, took their clothes off, wrung them, put them on again, and then walked off without uttering one word!

Two Turks saved from drowning.

Transport of stores.

Up to June 24, 490 camels and about 105 mules had been sent off to Port William on the Euphrates, laden with our small stores. Some 200 men had also carried to Antioch various pieces of angle iron which could not be conveyed on the backs of animals over the mountainous country. But

this was as nothing compared to the undertaking then before us—namely, the transport of the heavy weights. Four artillery waggons, laden with sections of the 'Tigris,' and drawn by horses purchased by the Expedition, had been sent away; the horses were, however, so imperfectly broken in for drawing, that the prospect of the waggons making a moderately quick journey was not very promising.

The keelsons to be tracked.

Finding that the long wooden keelsons of the two steamers could not be conveyed past the intricate windings of the road between our camp and Antioch, the Colonel decided on making the attempt to track them up the river to Antioch, and entrusted this duty to me. Accordingly I started with four of the longest pieces of keelsons, four English sailors, twenty-one natives, and a boat.

The river, after the first 4½ miles, being one series of rapids over rocks, with occasional weirs built right across, our labours were not only severe but hazardous in the extreme; each piece of timber had to be dragged up these rapids separately.

Our pitiable plight.

By June 28 we succeeded in arriving within one mile of Antioch, but in a pitiable plight—two of our English sailors, as well as myself, having lost our shoes in the water, besides other portions of our clothing, from the repeated upsetting of the keelsons when secured together as a raft. But the prospect of success, and the consequent disappointment of every dismal expectation of some evil prophets left in the camp, quite rewarded us for our exertions and mishaps. However, a sad blow to our hopes occurred this forenoon.

We had arrived at a bend of the river where the water became a shallow torrent for a considerable distance, quite impassable for my keelsons. It was therefore decided to convey them overland to the next bend of the river. The boat was accordingly at once sent across with a few of our men, but on our return we found that all the rascals left behind had deserted. This obliged us to leave the keelsons properly secured and return to the camp. A few days afterwards it fell to the lot of Mr. Fitzjames to complete the transport of my late charge to Antioch.

Desertion of natives

Arriving at the camp on June 29, I found consider-

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Arrival at Port William.

able progress had been made in despatching the light articles by camels and mules; preparations were also going forward for the serious portion of the transport. Several of the moderately heavy loads, such as the 'Tigris' sections, a flat-boat on wheels, &c., had already started, but the heavy boilers and diving-bell still remained. Messengers with broken axles, wheels, &c., were constantly arriving from the waggon-trains already on the road, and many waggons were temporarily abandoned from the desertion of the natives with their oxen.

Up to July 4, I had been very busy sending off light waggons, and helping others on the road out of their difficulties—also getting them up the first and most difficult hill, which rises abruptly from the plain of Suedia, about four miles from the camp. This hill, celebrated in the annals of the Expedition on account of the many hard days' work it afforded, is the worst on the whole line to Antioch, and was christened the 'Hill of Difficulty,' or 'Zigzag Hill,' our engineers having made a rough and scarcely practicable zig-zag road up it. All our heavy weights had at first to be dragged up this hill with tackles attached to anchors sunk into the earth at each turning of the road, and screwjacks applied at the rear of the waggons. Ultimately, having broken several anchors, we adopted the plan of dismounting the boiler from its waggon, and then *parbuckling* it up the hill—in other words, we fairly rolled it over and over until it arrived at the summit. An advance of 100 yards was in some cases a good day's work.

The Hill of Difficulty.

A train of waggons.

A summary of my journal when in charge of one train of waggons may give a tolerable idea of the difficulties encountered. The train consisted of two boilers, weighing $3\frac{1}{2}$ and 4 tons respectively, each mounted on a low four-wheeled truck—an engine bedplate weighing $2\frac{1}{2}$ tons, fitted with axles and wheels, and a flat-boat, also fitted with wheels.

July 5.—We expected a large muster of men and oxen at daylight this morning to convey this train, but only 25 men and 22 oxen arriving, we started with the bedplate alone, but had not proceeded a quarter of a mile when the guiding-pole broke; this was repaired, and in an hour's time we were off again, arriving at dusk at the 'Hill of Difficulty,'

after sundry disasters, and sleeping by the side of the bed-plate.

At daylight we found that the whole of the men had deserted with their oxen. We therefore returned to the camp, where the flat-boat was ready for a start, eight of our horses having been attached to it, and twenty Syrians to man the drag-ropes. A large mast was fitted, and the sail hoisted to a fair and fresh wind. Away we went in gallant style, the men and horses having little to do excepting to direct the course by the guiding-pole. All went well upon the smooth plain, but upon entering a narrow lane three miles from the camp a large stone caught one of the forewheels, and broke off the axle and guiding-pole. It was now too late for any further work; all therefore returned to the camp ready for the boilers, having first tilted the boat over into a ditch to clear the road.

Desertion of natives with their oxen.

Through the great exertions of our Colonel and the authorities of Antioch, a large collection of Syrians with their oxen was made: 70 oxen and 80 dragropemen were now attached to the largest boiler and waggon, and a few less to the smaller boiler. We started in the afternoon, and at dusk arrived close to the flat-boat, which was now in a fit state to proceed on its journey. Here we bivouacked for the night. Four cowasses had been sent from Antioch to look after the men and prevent their running away; we found them particularly useful in this respect.

Dragging the boilers.

At daylight an additional supply of oxen and men arrived for the flat-boat. All three waggons, therefore, started together, but the road was so loose and uneven that our progress was not very satisfactory; however, at sunset we found ourselves at the foot of the Zigzag Hill. The jackals seemed to consider us as intruders here during the night, for they howled incessantly, and one managed to get on the top of one of the boilers and steal a piece of meat, although men were lying down in all directions about it. One of the 'Columbine's' officers, who stayed all night with us at the camp, was so alarmed at the howling jackals, that he sat up with his pistols in hand, and could not be induced to sleep on shore again.

Jackals.

When the light had again appeared, we set to work with

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the bedplate, and in two hours succeeded in dragging it by main force to the top of the hill, and by noon the flat-boat was placed by the side of the bedplate, having capsized and rolled over the side of the road in consequence of one of the forewheels getting jammed under the bottom of the boat. Fortunately, it had only a moderate fall of about ten yards.

Dragging the smaller boiler.

The smaller boiler was now taken in hand; 100 oxen were attached to it, and all the men manned the drag-ropes. The signal was given, and a rush made with such goodwill that the boiler ran *nearly* up to the first turning of the zigzag road; here, however, it stuck, and could only be moved forward inch by inch with tackles attached to anchors in front, and screwjacks applied to the rear of the waggons. By sunset we had only advanced to the first turning of the road, about 100 yards from the foot of the hill; here, unfortunately, the guiding-pole was broken, and we were occupied until it was dark in repairing it. No time was lost in the morning, so that by noon we felt great pride in beholding the first boiler on the summit of the Hill of Difficulty, by the side of its smaller brothers,—the bedplate and flat-boat.

And now for the largest boiler! A few men and oxen had stolen away during the night; still, from the experience we had gained with the first boiler, we did not despair. About 90 oxen were yoked to it, and, in addition, tackles were brought down to each side of the waggon, and fastened to heavy anchors sunk into the earth at the first turning of the road. A general rush was then made, and away the boiler went right up to the turning of the road without one stop; the men became frantic with their success, screeching and yelling with excitement. It was impossible to persuade them to stop at the turning; on they would rush, and round the pole and fore axletree would turn to suit the next length of the zigzag road. The strain was far too great, the pole broke, and the boiler toppled over and fell with the waggon on its side, and partly overhanging the precipitous side of the road. By the greatest mercy no one was hurt, although one or two escapes were marvellous. No further progress could be made this day; but before lying down to rest the boiler was remounted, and the shortened pole again put in its place.

Marvellous escapes.

During this day a native had brought me a beautiful water-melon, upon which I contemplated breakfasting the following morning. Accordingly, after picketing my horse close to me, I put my melon into a carpetbag to make a pillow, and being very tired, soon fell sound asleep. When I awoke in the morning I found, to my surprise, that my head was lying exceedingly low, the carpetbag in fact being quite empty—the melon had vanished! No human being was stirring, and my horse was standing with his head over me, looking so sleepy and so innocent, that I should never have discovered the thief, had not one single melon-seed still remained on the upper part of his lower lip!

Adventures of a water-melon.

I may here remark, that during the whole of my hard work, nothing proved to be so refreshing in the evening as tea. An old preserved meat-tin served as my kettle, teapot, and cup. When each day's work was over a fire was lighted, and the tin full of water placed on it. When the water boiled, the tea, sugar, and milk—when obtainable—were introduced. No king could relish his supper more than I did this decoction, accompanied by a chicken and some wheaten bread.

Making tea.

And now for the boiler. Notwithstanding the sharp look-out kept by the cowasses, the men and oxen had gradually slipped away during the nights, and when prepared to start once more, we found our force reduced to 58 oxen and as many men. In vain we toiled on; every inch of ground in advance was obtained by screwjacks applied to the rear of the waggon, and by noon we had only advanced some 30 feet! Accordingly, after dinner it was resolved to try a new method. The boiler was taken off the waggon, and then turned over and over as it was rolled up the hill. This proved to be by far the most rapid way of progress, for by eleven o'clock the following day all four waggons were at the summit of the hill, the boilers mounted and ready to proceed; but alas! our men and oxen had melted away; sufficient only were left for the bedplate and flat-boat, which were at once sent on, and in about five days' time, after various breaks-down, arrived at Antioch.

The boiler again.

More rapid progress.

Arrival at Antioch.

The two boilers, however, had to wait several days, and upon examination it was found that the roads leading down to two mountain torrents on our route were too narrow for

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Widening the road.

the boiler-waggons to pass. My time was therefore occupied in widening the road with the few Syrians that could be collected.

Native method of bleeding.

Nothing of any moment occurred during this work, excepting a curious plan adopted to bleed one of the natives, whose head had become affected by the intense heat of the sun. The patient was seated upon a stone, and a small cord passed round his neck, each end being held by a person on either side. The doctor—who evidently was a barber by profession—now produced a razor, and shaved clean a small spot upon each temple. This being accomplished, the signal was given to haul upon the cord, the natural consequence of which was, our patient's face became purple, with his eyes starting out of his head; the doctor now placed his razor's edge upon the right temple where it had been shaved, and then, with a slight flip of his finger upon the back of the razor, skilfully cut a small vein. The same operation was repeated on the left temple, so that two small streams of blood spouted out to some distance on either side, the doctor occasionally examining its quality by catching a little on a loose stone. At last he gave the order to slacken the cord, when the fountains instantly stopped, and the patient was helped to his home. Whether this blood-letting extraordinary was attended with any good effect I never heard, neither did I ever see the poor fellow again.

Death from sunstroke.

One of our own seamen also received a sunstroke at this time, and appeared like a drunken man; he was carried into Antioch, and died in a few days.

The road at length was widened, and oxen and men assembled for the two boilers on waggons left on the summit of the Zigzag Hill, so on we proceeded in good spirits. We made an excellent forenoon's work until just before dinner-time, when, in descending a narrow defile, the fore-truck of the foremost and largest boiler-waggon caught against the side of a rock, and in an instant the pole, already damaged at the Zigzag Hill, was hopelessly smashed, and the boiler-waggon in the rear could not possibly pass. Here was indeed a difficulty! Nothing in the shape of a heavy beam or pole was apparently nearer to us than the camp, some eight miles distant. Already I noticed pleasure in the countenances of

An unexpected difficulty.

the men at the prospect of being allowed to return to their homes. In a downcast mood, I told them to sit down and eat their dinners, and then strolled to a small hovel or house a short way off (the only one within a range of some miles), to obtain some shelter from the burning heat of the sun. The family were squatting round their dish of pilau, to which I was invited. I then stretched myself out upon my back, to ruminate upon my hard fate, and decide the difficult question —what is next to be done?

How the difficulty was overcome.

This question was solved in a moment, for upon looking upwards my eyes rested upon a great beam which stretched along the length of the house, and, in fact, supported the whole roof. In an instant I was at my host's side, and, to his amazement, offering to buy his house at a handsome price, provided he and his family would clear out instanter. The sight of the gold 'gazis' overcame all scruples: by the time my men had dined, the house was emptied, and half a dozen sailors were to be seen tearing off the roof and rolling down the beam. In short, the new pole was fitted, and the waggons again on the move, within an hour after dinner-time. The pole was nearly double the size of the broken one, and I may here add that, although the poles of every other waggon were repeatedly broken on their journeys, this one arrived triumphantly at Port William, on the Euphrates, as sound as when my sailors fitted it.

Disasters on the journey.

To describe a greater portion of the remainder of the portage of these two boilers to Antioch would be a repetition of much the same disasters—such as the breakage of axles, bolts, guiding-poles, &c. The roads constructed down to the two mountain-torrents (the two Kara-Chais) were highly dangerous, and in easing one of the boilers down to the bed of the first torrent (at this time nearly dry), the men holding back by the dragropes could not check its speed sufficiently; consequently one of the fore-trucks came against a large boulder, broke the fan-axle, and maimed the legs of the three nearest oxen. In each case where an iron axle was broken, a whole day at least was necessarily lost in sending it to the camp for repair.

At length, during the forenoon of August 5, we arrived opposite to the gates of Antioch; and as the men were

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Arrival at Antioch.

heartily tired of their work, and had become very lazy, we halted close to the bridge across the Orontes and dined, that I might avail myself of the opportunity to obtain the services of a cowass from the Governor, who had been extremely attentive to all our requisitions. Accordingly, shortly after we had again started for Gūzelburj, a village about two miles beyond Antioch, where all the heavy weights were transported by boats through the Lake of Antioch, and up a small river to a place called Mūrad Pacha, a magnificently-dressed cowass came strutting after us, and in an equally magnificent voice ordered the cavalcade to stop. I felt charmed!—now at last we had a man who would keep my lazy Syrians to their work. We halted in silent expectation of the harangue it was supposed he was about to make. Judge my surprise when, after the last boiler-waggon had stopped, he coolly mounted it, seated himself in a comfortable place, and then, with a majestic wave of the hand, directed the men to proceed! This was too much!—it evidently was my turn to act. Burning with anger, I again directed the waggons to stop, and summoned the cowass to dismount, upon which he condescendingly ordered me away: in another instant he was rolling in the dust at the foot of the waggon, amidst the frantic cheers of the waggon-men. The fellow got up in a great passion, put his hand on his pistol, but had sufficient presence of mind left to remember that 'discretion is the better part of valour;' he therefore contented himself with showing his contempt for me by sundry scowls, then turned on his heel and marched back to Antioch amidst the jeers of the waggon-men, who, let me add, worked exceedingly well for the rest of the afternoon, evidently as a reward for my having humbled one of their hated class of cowasses.

An impudent cowass.

His summary punishment.

Gūzelburj.

We arrived at Gūzelburj the same afternoon, and about this time there is a note in my journal to the effect that Captain Estcourt, Lieutenant Cleaveland, and myself were the only executive officers then fit for duty. Colonel Chesney had been alarmingly ill, so much so indeed that the second officer in command had notified to us that the Colonel's case was hopeless. To-day, however, our spirits were cheered by the news of his convalescence. His kindness and tact in

Illness of the Commander.

selecting officers for special duties, then trusting them to carry out his wishes, and when successful (as was almost invariably the case) giving them the fullest credit, had endeared him to all who really had at heart the desire to carry through this arduous transport.

But to return to this miserable little village of Gūzelburj, with its hovels plastered with buffalo dung, and swarming with vermin. Many pleasing recollections are brought to my mind with reference to it. It was the head-quarters of my dear friend and brother-officer, Fitzjames, who superintended the transport of the stores from thence to Mūrad Pacha.

Recollections of Gūzelburj.

Upon one occasion when I again arrived with some waggons of boilers, I found everything at a standstill; all the boatmen had left, and Fitzjames was lying in his tent, apparently insensible with a raging fever, his tongue black and swollen, with one large blood-red crack across it, his Maltese servant being the only person with him. A doctor was at once sent for from the hospital which had been established in Antioch. Upon his arrival he shook his head very sagely, pronounced the case all but hopeless, and requested the immediate removal of the patient to the hospital. To our utter astonishment, Fitzjames upon this opened his eyes, shook his head, and muttered, 'I will die here.' The worthy doctor left in disgust; and as it was necessary for me now to remain at Gūzelburj to despatch the heavy weights by boats, I made my patient as comfortable as possible, and during every spare moment employed myself dropping water gently upon his poor tongue. He took little or no medicine, but the water continually moistening the tongue evidently had a surprising effect.

Illness of Fitzjames.

How Fitzjames gradually improved, and at last was able to sit upon my horse, supported by me whilst walking by his side:—how upon one of these occasions he placed his dear kind hand on my head, and with the tears starting from his eyes exclaimed, 'Had you not backed me up, and refused to let the doctor take me to that hospital, I should now be dead: I shall never forget your kindness to me!'—how I am certain he *never* did forget it to the date of his death, when Captain of H.M.S. 'Erebus,' in Sir John Franklin's ill-fated

His gradual convalescence.

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Polar Expedition:—but how in our case he was spared, and lived to be the cheerful, jovial spirit of the Euphrates Expedition, to help us on when sickness and weariness depressed us all:—these are indeed reminiscences most pleasing for me to dwell upon, but perhaps uninteresting to the general reader.

Captain Charlewood's conclusion.

Moreover, it is evident my chapter, written with the view of giving some idea of the labour and difficulties with which we had to contend in transporting our two steamers from the Mediterranean to the River Euphrates, and more especially between Suedia and Antioch, is now spun out to its fullest extent. Here therefore I must end.

APPENDIX X.

REPORT BY THE LATE MR. (AFTERWARDS CAPTAIN) JAMES FITZJAMES, R.N. (1835).

Mouth of the Orontes, June 1835.

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On June 3, Omar Effendi came from Antioch with a message from Ibrahim Pacha to the Colonel, to the effect that he had received orders from Mehemet Ali Pacha, his father, to give the Expedition all possible assistance, and that, in consequence, he (Ibrahim) had ordered the Mutsellim of Antioch to collect 1,000 camels and a number of oxen for us. This the Colonel had been apprised of by a messenger who arrived in the night from Mr. Dibbs.

Leave from Ibrahim Pacha for the Expedition to proceed. Camels and oxen to be collected.

Lieutenant Lynch joined us the same evening from Aleppo, and the following day attempted to get up the Orontes in the 'Tigris;' but failing in the attempt, we returned, taking the bank in several places, and giving her several most severe shocks, owing to her bad powers of steerage.

Last cruise of 'Tigris' on the Orontes.

On the 5th, Yusuph Saba received orders from Ibrahim to repair the road to Antioch, which, however, had been previously done by Lieutenant Lynch, but not in a manner to admit of the passage of our boilers; in addition, the recent heavy rains have much injured what had been done, particularly by swelling the two rivers, Great and Lesser Kara-Chai, and the numerous streams which cross the line of road to Antioch.

Orders for repairing the road.

At noon of this day we took the coals out of the 'Tigris,' and dismounted her wheels previous to breaking her up; and on the 6th Lieutenant Lynch left to see the Pacha, and with orders to get the road cleared between Antioch and Birejik. I was this day ordered by the Colonel to commence levelling and otherwise clearing obstructions on the road. I began about four miles off, with fifty men, most of whom were old and almost useless; but by dint of constant attention, and

Breaking up 'Tigris.'

First repairing of road.

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pointing out each stone which I wished removed, and every part I wanted cut away, I succeeded in making about a mile and a half tolerably good. I was assisted by Mr. Michel, who was of much use to me as an interpreter. Mr. Bell was sent on to a hill about four miles from the camp, which from its excessive steepness was ascended by a zigzag road to the height of about 100 feet, and the remainder of it a very rocky road. Here he had 21 men only at work.

June 7.—I had only 21 men on the road, and they did not come till 10 o'clock.

June 8.—I had great difficulty in procuring men. By 10 A.M. I had 30, collected by Mr. Michel, who went to Yusuph Saba's.

First caravan of camels.

At the camp 55 camels were loaded with great difficulty, as the cameleers would only take the lightest loads, and that only after a great deal of vexatious talking and quarrelling. Three of them cast loads a mile off.

'Tigris' cut into eight sections.

'Tigris' was this day hauled up on shore, her engines being out, and the men were employed cutting her into eight sections.

June 9.—I had only 21 men, but heard that Mr. Bell had 45, and Lieutenant Lynch 60 working at the first Kara-Chai.

I continued working at the road till the 15th, during which time I had always more or less difficulty in procuring men. Occasionally we had heavy rain and thunderstorms to interrupt us, and the sun in the middle of the day was very hot.

Native carpenters.

In the meantime the 'Tigris' was cut into eight sections, and we got some native carpenters from Antioch to assist in making waggons. 200 bullocks also came on the 12th, but

Bad bullocks first time.

after fruitless attempts to make them draw weights, we discharged them. Lieutenant Cleaveland went to see Ibrahim Pacha on the 14th, to state the want of attention to his orders.

The Mutsellim of Antioch at Suedia.

June 16.—The Mutsellim of Antioch arrived by order of the Pacha with 96 men, who carried away some iron ribs of the 'Euphrates.'

Second caravan of camels.

June 17.—Sent away 60 camels, loaded after great difficulty—the heaviest weight was only 600 lbs., and mostly under; also 48 men carrying iron. The Mutsellim and the Agha of the district being in attendance on the 18th, seventeen horses were bought for drawing the waggons, none

of which, however, had ever been in harness before, the owners being averse to allow them to attempt to draw, although the Mutsellim used his utmost endeavours.

On June 19 the Colonel ordered me to take the diving-bell truck to Antioch, laden with iron sheeting; but I was obliged to desist, as the bullocks would not draw.

June 20.—At daylight the five platform waggons (under Lieutenant Cleaveland and Mr. Eden) started, each drawn by four horses, and about 100 men accompanied them. The heaviest, however, having been left behind, I was ordered to take it on. I therefore started with four horses and thirty men at the dragropes, and got it as far as the first stream, about three miles from the camp, where we slept in a cornfield.

First start of artillery waggons.

June 21.—We worked hard all day, beginning at 3 A.M., and, by taking the men from two arabas and a waggon made of the gun-slides, laden with iron, I increased our force to upwards of 60 men. By means of a tackle, we got it over the first hill, to within a mile of where Lieutenant Cleaveland was with the other four waggons; but, owing to the great difficulty of getting them up the hill by the zigzag road, he ordered me to give him all my men, which increased his force to 160, who dragged the waggons up one by one.

June 22.—I walked back to the camp, starting at 3 A.M., and on my way met 75 camels laden with machinery, stores, &c., some of them carrying about 800 lbs. Mr. Clegg accompanied them. I also passed Mr. Rassam, who was bringing on the large truck and two arabas laden with iron. In the afternoon I started again, by the Colonel's order, and got one waggon to the foot of the large hill.

Heavy caravan of camels.

June 23.—Got all the waggons to the foot of the hill, and the large truck and artillery waggon up the steepest part of it. Being, however, obliged to unload the former, and make the men carry the plates of iron to the top, the iron slipped off the latter at the last turning and nearly killed a man. This day we had 103 men and twenty bullocks, all of whom were hardly sufficient to draw the waggons one at a time. Fifty-three camels and sixteen mules passed during the day, laden with iron, casks, machinery, &c. Lieutenant Cleaveland also rode to the camp from his waggons,

Truck and timber waggons.

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and returned again by night. We slept on the top of the hill; and, in the middle of the night, Captain Estcourt passed us, on his way to the camp from Birejik.

Chronometers.

June 24.—Lieutenant Cleaveland started from Antioch, and Mr. Thomson, who was carrying the chronometers. Seventy-six men and twenty bullocks dragged the two waggons to the Great Kara-Chai. The large truck descended with great velocity into the river, on account of its iron wheels and great weight. The bullocks were taken out, and the men held on behind with ropes. We crossed the river at half-past 7 in the evening.

Kara-Chai.

June 25.—By carrying the loads by hand, we got the waggons up the hill, and descended again into the second or Little Kara-Chai, and before dark got them up the hill on the other side. Walking on for an hour, I found Lieutenant Cleaveland and two artillery waggons in a cornfield, he having discharged his loads at Antioch. The fieldpieces arrived with two artillerymen.

Return of two artillery waggons.

June 26.—We got by sunset to within three miles of Antioch, having passed the most difficult part of the road, and occasionally unloading the truck and carrying the iron by hand. Eighty-four men to-day. Lieutenant Cleaveland passed with the two artillery waggons.

Get to Antioch.

June 27.—Got both waggons to the gate of Antioch, where I found two platform waggons encamped under charge of Mr. Eden; Lieutenant Murphy being employed repairing the road to Djezzer Hadid, just outside the town. I sent the waggon I brought with Lawrie to the village of Gūzelburj, on the right bank of the Orontes, four miles above Antioch, where he unloaded and brought it back to be repaired—the pole being broken—leaving the truck with Mr. Eden. Mr. Ainsworth arrived, having, in company with Mr. Bell, taken two boatloads of iron up the lake and to Mūrad Pacha Bridge.

First occupation of Gūzelburj.

Truck and waggon through Antioch.

June 28.—This morning Mr. Eden took the truck across the bridge and through the town, which, from the large stones and sharp turnings, was no easy operation. In the afternoon the other two waggons were got through, and all encamped about a mile off. They were dragged through by the tanners, who turned out about thirty in number, in

addition to the horses. Lieutenant Cleaveland arrived with the other two artillery waggons laden with iron, and Mr. Charlewood, who had brought four keelsons up the Orontes from the camp. Lieutenant Cleaveland returned thither in the evening. Lieutenant Murphy was at this time working in the house hired for the expedition, where we always lived when at Antioch.

Keelsons up the Orontes.

June 29.—Captain Estcourt arrived, and having ordered me to repair the road towards Djezzer Hadid, I proceeded to St. Paul's Gate, and set thirty men to work, who however did but little, as they were very lazy, and the cowass who was with them did nothing. Lieutenant Cleaveland passed on to Gūzelburj with his two artillery waggons, and Captain Estcourt went down to the camp. In the evening Omar Effendi paid us a visit, and said that he had been ordered by Ibrahim Pacha to remain at Antioch till everything belonging to the Expedition had passed, the Pacha being then at Adana.

Omar Effendi ordered to assist us.

June 30.—Lieutenant Cleaveland took the two artillery waggons, which went to Gūzelburj yesterday, to Djezzer Hadid Bridge in country boats to join Mr. Eden's waggons. Captain Estcourt having directed me to take the four keelsons which had been left about two miles below Antioch on to Gūzelburj, I went thither, having been assured by Omar Effendi that men would be there to bring them up; but none made their appearance. While there six more keelsons came up the Orontes, tracked by some twenty men, who left them with the other four.

Artillery waggons to Djezzer Hadid.

More keelsons up Orontes.

July 1.—I took one of our small boats from the place where it had been lying with the keelsons up to Gūzelburj; it was easily rowed up the river, and hauled over the weirs, of which there are five above Antioch.

July 2.—Captain Estcourt having directed me to take charge of the depôt forming at Gūzelburj, I pitched two tents there, and took up my abode with one seaman; and this day the first detachment of two-wheeled waggons, or arabas, arrived with some heavy pieces of machinery, and on the following day one more with iron plates—also two keelsons came up the river.

Take charge of depôt at Gūzelburj.

The road beyond Antioch by Djezzer Hadid having been

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found too bad, Captain Estcourt determined on sending all the things to Mūrad Pacha by water.

Line of transport altered.

Description of Gūzelburj.

Gūzelburj is situated on the right bank of the Orontes, on a point formed by a bend of the river, which is here about 50 yards wide, 2½ fathoms deep, and the current varying from two to three knots per hour.

There are not above twenty houses, and the inhabitants—who are, as I was given to understand, Fellahs—gain a livelihood by their boats, which they work up to Mūrad Pacha Bridge, and up the Orontes, bringing corn to the mills of Antioch, and occasionally passengers, besides rushes gathered from the lake for mats, &c.

Boats.

These boats are 37 feet long, 5 feet broad, and 4 feet deep; perfectly flat-bottomed, and propelled by a man on the stern, who pushes with a long pole; occasionally they have another poler forward.

Cattle.

Large herds of buffaloes come in every evening to be milked, finding pasture during the day on the immense plains which, extending to the Lake of Antioch, spread

Natives.

themselves onwards to the Taurus Mountains. I always found the men civil, but probably through fear, as they occasionally refused to sell us articles of food.

The Sheikh was a very nice man and worked hard for us; but he died after I had been there a short time, and his successor was very lazy and avaricious, and only got work done when obliged to do so by threats of reporting his conduct to Ibrahim Pacha, of which he was in great terror.

Iron brought back from Djezzer Hadid.

After sending four boats to Djezzer Hadid to fetch the iron back, and discharging two arabas with heavy machinery, I rode down to the camp at Suedia on July 6, by order of Captain Estcourt, meeting on my way one of the sections of the 'Tigris' on a four-wheeled waggon, and one of the large flat-

Go to Suedia.

boats, also mounted on four wheels, with Mr. Charlewood, who had not sufficient men. All the blacksmiths were working hard to complete some waggons for the boilers, and we were employed mounting some boilers and sections of the 'Tigris' on their respective waggons, several arabas with machinery

Arabas taken by natives.

being sent on with parties of natives, who were paid beforehand a certain sum, varying to 200 piastres, for the journey to Gūzelburj. They seldom or never broke their engage-

ments, and that only when the waggon broke down, which was but too often the case, or had got so immovably fixed in a ditch or stream, as to require more energy than they possessed to extricate it.

Powder starts for the 'Euphrates.'

Thirty-three mules started on the morning of the 8th, laden with powder, and the blacksmiths and riveters, to commence putting up the 'Euphrates' at Birejik; and on the 9th twenty mules more with rockets and baggage. On the 10th the Colonel started with more men and riveters to join the powder caravan.

Widening road for sections.

July 10.—I was this day employed widening the road into the Great Kara-Chai with fifteen men, which were all that came, notwithstanding our repeated applications for more.

Flat-boat stuck in a lane.

At this time the flat-boat and three arabas were lying broken down between the two Kara-Chais. Having proceeded to where the former lay—to wit, in a narrow lane, with the wheels axledeep in mud—I received orders from Lieutenant Cleaveland by a Maltese to take Mr. Charlewood's place with the waggons, and send him back to mend the road. I therefore proceeded to Antioch, where I found that the section of the 'Tigris' had passed on to Gūzelburj, and that the Colonel had gone on to Birejik.

On the following day I went to Omar Effendi at the serai, for an order to get men for the flat. He referred me to the Mutsellim, giving me a note for him, which I took to him, but got no men. I therefore wrote again to Omar Effendi in the evening, stating the circumstances. The next day (12th) I went out to the flat and waited till 2 P.M., when Ibrahim Effendi came with fifty men and ten bullocks; and after an hour's hard work, aided by his personal exertions, we succeeded in extricating the flat from the gutter, and got it to the top of the hill over the second Kara-Chai. At this time one cylinder of the 'Euphrates' and another araba were lying in a stream near Antioch, broken down.

Flat-boat got out of the lane.

Flat broken down.

July 13.—The flat having a bolt broken, I got it repaired at Antioch, which delayed us till 2 P.M., the men and bullocks waiting in the adjoining fields; but we got it within two miles of Antioch, and the next time it broke in three different places; the last was one wheel splitting in two, not having been properly fellored. I therefore made the people take out

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the two gin-poles and baggage, which they carried to Gūzelburj, and I discharged them, leaving the boat a quarter of a mile from Antioch.

July 15.—Lieutenant Cleaveland sent Frew, the carpenter, to repair the flat; also an order to get the iron then at Djezzer Hadid taken to Gūzelburj. I accordingly wrote to Omar Effendi to order the boatmen to do as required.

Paddle-beams.

July 16.—The four paddle-beams arrived, having broken down twice near Antioch, and finally halfway to Gūzelburj.

Mr. Bell's illness.

Mr. Rassam arrived from Gindareez to assist us, and Mr. Bell came down from Mūrad Pacha in a boat, very ill.

Flat arrived at Gūzelburj.

I applied for twenty men, but only got ten, and eleven bullocks, which took the flat to Gūzelburj.

Truck and iron in boats from Djezzer Hadid.

July 18.—The iron arrived from Djezzer Hadid in five boats, with the diving-bell truck. I completed five good boats of 1½ to 2 tons each, and sent them up to Nomad Pacha. The following day I sent Mr. Rassam to Suedia with four empty arabas. In the evening Lieutenant Cleaveland came in to buy necessary articles, such as pitch, rope, &c., and to procure money, having left three sections of the 'Tigris' and one boiler broken down near the camp at Suedia.

Repairing road between Antioch and Gūzelburj.

July 21.—I commenced repairing the road between Antioch and Gūzelburj with twenty-six men, and also worked with them the following day; and on the 23rd I went out to where the section of the 'Tigris' was lying, five miles from Antioch, to get it repaired, while Lieutenant Cleaveland and Mr. Charlewood passed on to Gūzelburj with two sections and one of the bedplates of the 'Euphrates' on wheels; but one of them and the bedplate broke down one mile from Antioch. Lieutenant Cleaveland and Mr. Charlewood went back to Suedia, and I got blacksmiths from Antioch to repair them; the next day the bedplate got on to Gūzelburj. On July 25 I got the section from Antioch to Gūzelburj with a party of Turcomans and their bullocks, who had remained by it. The following day was employed getting the blacksmiths and carpenters to work for the other section of the 'Tigris,' and having on the 27th sent a carpenter to repair it, I got it on to Antioch on the evening of the 28th, with twenty-seven men and twelve bullocks, which were very bad. It then broke down again. It was re-

Two sections arrive at Gūzelburj.

Section breaking down.

paired the following day and got to Gūzelburj, where I found the smallpox raging amongst the inhabitants.

July 31.—I was obliged to write a strong letter to Omar Effendi about the unwillingness of the men at Gūzelburj to start with our machinery; and on August 1, having procured seven workmen from Antioch, I loaded the flat with heavy pieces of machinery.

Flat loaded.

August 3.—After several fruitless applications at Antioch for carpenters to repair the native boats, they at last arrived, and the flat started, poled by six men.

August 5.—Lieutenant Cleaveland sent for me to Antioch from Gūzelburj to get money from Mr. Dibbs, and Mr. Charlewood arrived with two boilers of the 'Euphrates.' They both returned to Suedia the following day; and the native boats having been repaired were launched, four in number, and loaded the next day with the remainder of the plates of the 'Euphrates' and some heavy machinery.

Two boilers at Gūzelburj.

Native boats repaired.

August 7.—At 10 A.M. I went to Antioch, where I found that the seaman, James Brown, had just died at our house, where he had been lying, attended most kindly by Mr. Haage, a Polish surgeon in the Pacha's service. Dr. Staunton arrived a few minutes after his death, and returned again to Suedia. Not having any men with me, I judged it expedient to have him interred according to the rites of the Greek Church, which was done by applying to Mr. Dibbs, and he was buried in the Frank burial-ground east of the town.

Death of J. Brown.

Mr. Haage.

Burial of J. Brown.

August 8.—Captain Estcourt came from El-Haman, and Lieutenant Cleaveland came in for money in the evening, which, as was often the case, we borrowed from Mr. Dibbs. We all three rode down to Suedia in the night. I returned the next day with Captain Estcourt and Lieutenant Murphy, the former going on to El-Haman.

To Suedia with Captain Estcourt and Lieut. Cleaveland.

At this time there were ready mounted on waggons at Suedia, three boilers, two sections of the 'Tigris,' one cylinder of the 'Euphrates,' and one bedplate of the 'Tigris,' waiting for men and bullocks, although the Mutsellim of Antioch was there.

State of transport.

On the 12th, Captain Estcourt returned again, and on the following day, in company with Lieutenant Murphy and myself, paid a visit to Ibrahim Pacha on his return from

Visit to Ibrahim Pacha.

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Adana. He was very civil, spoke much about the affairs of Europe, and particularly of the Russians, whom he said he should much wish to go to war with. Nothing was said about the Expedition. Omar Effendi acted as interpreter.

The same day, our flat and all the boats returned from Mūrad Pacha, and I loaded the former again the next day and sent it off.

Keelsons on horses.

August 14.—Captain Estcourt came to Gūzelburj, and we sent off to Gindareez, with some trouble, four of the short pieces of keelson end-pieces on four horses.

August 16.—All the boats went again to Mūrad Pacha with loads, two with iron and two with keelsons. Captain Estcourt left for El-Haman, and in the evening Lieutenant Cleaveland arrived with the other large flat-boat on wheels, having left three boilers and a section four or five miles from Antioch; one of the boilers had capsized; two half-sections came in from Suedia with natives, on large two-wheeled arabas.

Plank on horses.

August 17.—I sent fourteen horse-loads of plank ('tach-i-van') to Gindareez. In the evening, Lieutenant Cleaveland came in, having left the boilers a mile off. The next day Lieutenant Cleaveland went back to Suedia, and I got two of the boilers to Gūzelburj by 11 A.M., but could not get the Turcomans to take back the empty waggons; they all crossed over the river, and I observed that the natives of Gūzelburj would not ferry them over, on account of the difference of religious opinions. On the following day, having got the other boiler repaired, and procured men from Omar Effendi, I took it to Gūzelburj with twelve oxen and thirty-three men. The same evening the boats returned from Mūrad Pacha.

Boilers to Gūzelburj.

Boats returned,

August 23.—I went out to the road to bring in a waggon drawn by six horses, under charge of Harrison (artilleryman), and at Gūzelburj loaded our flat and all the boats with very heavy machinery, and started them all next day with the horse-waggon and its load, sending the horses by the north road to Mūrad Pacha.

and loaded again.

Illness.

This ends my proceedings at Gūzelburj, as on the 25th I was taken ill, and suffered so much from fever as effectually to prevent my exerting myself at all. Mr. Charlewood took my place, and having embarked nearly all the re-

Mr. Charlewood.

mainder of the stores, went to Mūrad Pacha on September 24.

On December 10 Dr. Staunton advised me to go to Port William, and finding from Mr. Eden, who had just arrived, that the Colonel wished me to go, and also feeling that I should not get clear of ague till I did, I made a start for Port William, where I arrived on December 16.

Arrival at Port William.

JAMES FITZJAMES.

APPENDIX XI.

REPORT OF A JOURNEY FROM BAGDAD TO CONSTANTINOPLE *VIÂ* KURDISTAN (1837).

BY WILLIAM AINSWORTH.

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LEFT Bagdad, accompanied by Mr. Christian Rassam, on Wednesday, February 1, 1837, and traversed the low level plain which stretches far and wide around the City of the Khaliphs to the post-house of Dūkala. The plain was in places intersected by canals of irrigation, and cultivated, especially near the River Tigris, but its general feature was barrenness. The course of the highway was marked by bleached heads of camels, oxen, and mules, and that so distinctly that it would have been impossible to have gone astray, even without a guide. It is difficult, however, for a stranger to find his way across these plains without such—they are so intersected by canals, and the roads are effaced by the rains and drought alike. The only objects of interest on this first day's journey were the well-known Tomb of Lokman, the ruined castle called Kalah Sakmasī, and a group of date-trees around Khan Jidida, our restingplace.

Plains of Bagdad

The next day (February 2) we travelled over a similar country, watered by derivatives from the Khalis Canal, itself derived from the Diyalah river; and passed several villages, all alike consisting of beehive huts enclosed within mud walls, and a few sepulchral tombs with groups of date-trees —trees spared probably on account of their sanctity. We rested at Jizanī, another lonely khan in the wilderness. A heavy thunderstorm during the night rendered the mud very slippery the next day (February 3). We crossed the Khalis Canal, where it was sixty paces in width, by a bridge of four arches. Several wild boars were met with on the way, and we shot a couple of desert grouse (*Ptèrocles*). Just before arriving at the khan of Delli Abbas, or 'Mad Abbas,' the

Diyalah river.

Wild boars.

horse of Pedro, a Portuguese boy who accompanied us, stumbled, and the boy falling on his hand broke the radius of the right arm. There being no wood, we got some reeds from the canal, and splitting them made a very comfortable contrivance for keeping the parts in apposition; and the elbow being bent to relax the biceps, and the arm tied up to the chest, the boy was enabled to continue his journey the next day, and no untoward symptoms interfered with the slow progress of recovery.

The boy Pedro's accident.

Four miles beyond Delli Abbas (February 4) we came to the Hamrin or 'Red Hills,' justly so named, being for the most part composed of supracretaceous red sandstones, very bare and waterworn. Vegetation was already prolific in favoured spots among these hills, and some places were clothed with flowering crocus and narcissus. Passing the Nahr-rīn, or (as Mr. Rich has it) the 'Nareen,' forty feet wide by two feet in depth, we came upon an extensive plain, called (after a village with a lofty mound attached to it) Kara Tēppeh—'Black or Ruinous Hill.' The village itself, where we rested for the night, contained about 400 huts, and there is a small burial-ground on the mound to the south. Mr. Rich,* who carried on some excavations here, found urns with bones; and he thinks it must have been a Dakma, or place where the fire-worshipping Persians of Sassanian times exposed their dead bodies. The people call the mound Namaz-Kilan Tēppeh, or 'The Mount of Prayer.'

The Hamrin, or 'Red Hills.'

Crossing the Tchaman watercourse the next day (February 5) by a dangerous bridge, we traversed several ranges of low rocky hills, and arrived in the afternoon at Kifri, a small town with about 1,200 houses, enclosed within a mud wall, and situated at the foot of higher hills to the SE. These hills are composed of red sandstone, clay, gypsum, and freshwater limestones, with some beds of salt and bituminous shales, and they are remarkable for their abundant naphtha springs. The hills attain an elevation of from 500 to 600 feet above the plain, and course in a remarkably straight line from N. 70° E. to S. 70° W.

Town of Kifri.

Mineral formation.

There are many breaks or gaps in this range, through which mountain torrents, and in some instances perennial

* 'Narrative of a Residence in Kurdistan,' vol. i. p. 13.

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streams, find their way; and these gaps have for the most part been defended by walls in olden times, and the streams dammed up. Such, at Kifri, is the Kuri-Chaï, or 'Dry River,' upon which are some ruins half a mile SE. of the town, and east of which is a large high mound containing jars or urns with bones, as at Kara Tēppeh, and which Rich also refers to the epoch of the Sassanian fire-worshippers. This country would, from the abundance of naphtha, naturally be a favoured place of residence with the fire-worshippers, just as was the case with parts of Susiana and Luristan, and a few Parsīs are still to be met with at Bakū on the Caspian Sea. There are traces of buildings to be seen around the mound at Kifri, having square basements like those at Kasr Shirīn. Above Kifri itself are also vestiges of a wall and fragments of solid buildings, apparently towers of defence; and farther up the torrent are some sepulchral grottoes, in which the rocky shelves for the bodies are still visible.

Seat of the Sassanian fire-worshippers.

Seven miles to the SW., on the plain, are the ruins of Eski (or 'Old') Kifri. Here is an immense artificial mound, having almost perpendicular sides, except where the rains have made deep cuts or furrows. Rich dug up urns with bones at this place, and he considers it to be another relic of Sassanian fire-worshippers. There are several other similar mounds in the neighbourhood, one of the largest of which is called Ash-Tūkan.

Eski-Kifri.

Beyond Kifri the plain of Bayad, or Beiat (so called from the Turcoman tribe frequenting it), slopes down gradually from the Kifri Hills to the Valley of Tchaman. It is cultivated in parts, and dotted with the mounds of Sassanian fire-worshippers. Passing one of these mounds with a ruined castle ('Kizzel Kharaba' of Rich, but our informants called it Kiz Kalahsi, 'Girls' or Maiden Castle'), we came to another large Sassanian mound, fourteen miles from Kifri, called Ūnīki Imàm, from a Mahommedan tomb, and close by which are naphtha springs.

Sassanian remains.

We arrived the same evening (Monday, February 6) at Tūz-Khurmatī, or Khurmatí; but before entering the town had to ford the Ak-Sū, or White River, a tributary to the Adhim, or Adhaym. This stream passes through a gap in the hills, which are here designated as the Jebel Ali in Arabic, and Ali

Ak-Sū river.

Tagh by the Turks, from a 'kumbet' (or dome) on one of the hills, which is said to commemorate the spot where Ali once picketed his horse.

Tūz Khurmatī.

The population of Tūz-Khurmatī is estimated at about 5,000 souls, and the town is surrounded by gardens of date, orange, lemon, fig, apricot, pomegranate, and olive trees. The people are Turkish and mostly Ismaelians, and Rich believed there were among them Tchiragh Sundirans, or 'extinguishers of lights.' The ruins of an old Christian church (Syrian or Chaldean) are met with west of the town. The pass in the hills was also in olden times defended by a wall with towers, of which all that remains in the present day are fragments of a castellated structure and of the wall.

Naphtha springs in the hills.

We passed the next day in exploring the celebrated naphtha springs in the hills in the neighbourhood. These springs, and the nature of the wells from which they are derived, are so minutely described in the Report on the geological portion of the Euphrates Expedition (published under the title of 'Researches in Assyria, &c.') that it is needless to enter here upon purely scientific details. Suffice it to say that the springs are thermal, that they give off hydrosulphurous acid, and that some of them contain salt as well as naphtha. The value of the produce of the latter is estimated at 20,000 piastres per annum. The decomposition of the hydrosulphurous acid also gives birth to deposits of sulphur and alum in an effervescent state. It is said that about 30 pints of naphtha may be skimmed off the surface in twenty-four hours. The barometrical indications gave an approximate elevation for Tūz-Khurmatī of 114 feet above Bagdad. The plain inclined hence by a very gentle slope towards the Hamrīn Hills, and there were several mills along the course of the river, each of which had a mud tower attached to it, in which to post a guard—all the places on the Kurdish border being exposed to inroads from robbers of that nation.

Elevation of the plains.

As we proceeded in a north-westerly direction on Wednesday, February 8, the hills kept gradually diminishing in height till, about eight miles beyond Tūz-Khurmatī, they almost descended to the level of the plain. Halfway between Tūz Khurmatī and Ta-ūk ('Place of Fowls') two beds

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of mountain torrents were passed, as also a 'kahrīz' or subterranean channel for conducting water from the hills to the plain below, having shafts sunk at intervals. A large tributary to the Adhim flows past Ta-ūk by several distinct streams, none of which were at this season of the year more than two or three feet deep, and the largest was forty paces in width. This is described, however, as being a very formidable river at certain seasons, filling its whole bed, and carrying everything before it. In the neighbourhood of Ta-ūk, which has only a ruinous minaret to distinguish it, is the village of Ali Saraï and the sepulchral tomb and chapel of Zīn-al-Abidīn ('The Best of Hermits'). There are also ruins of an old Christian church.

Ta-ūk, or 'Place of Fowls.'

Kirkūk.

From Ta-ūk to Kirkūk we travelled (on Thursday, February 9) over plains of nearly similar character to what we had traversed for the last three days—only more intersected with watercourses, and better cultivated in consequence, with more villages. To the west of Ta-ūk was the 'New Village,' as also Jurnaïla, 'The Pretty Little One'; and four miles beyond Matara, which gives its name to a range of gravelly hills. There were many 'tels' or mounds on the plain, one of which, designated Tamaranda, had perpendicular sides. One large village, with rivulet and gardens, was called New Tūz-Khurmatī. Kirkūk, probably the Ecbatana of Babylonia, with its extensive but ruinous castle, full of houses also in ruins, on the summit of a rocky hill, and its far-spreading suburbs diversified by minarehs and the domes of mosques, presents an imposing appearance. It is a town indeed of some importance, and contains a mixed population estimated at 10,000 souls. It is watered by a tributary to the Adhīm. The bazaars are covered and well supplied. The manufacture of blue cloth for women and tanning are carried on; wine is made for sale in Bagdad, and plaster from the gypsum. We saw some large freshwater fish in the market, brought from the Tigris. The only remnants of antiquity that met our eye during our brief stay were an octagonal tower, about thirty feet high, in the castle precincts, built of tiles, with enamelled inscriptions, and a very ruinous structure in the suburbs called Baltar—a strange name to meet with in such a country.

Population of the town.

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Our attention was in reality concentrated upon the very remarkable phenomena of natural fires, which have existed from the remotest times in this neighbourhood, and which have failed to attract that attention which the pens of graphic travellers have attached to similar yet less persistent phenomena at Bakū on the Caspian Sea. In this case the flames come forth from a depression of the soil several hundred square yards in extent, on the crest of a ridge of low hills to the north-west of Kirkūk. The flames are scarcely visible in a strong sunshine, but they are very brilliant by night. Wherever a spear was pushed into the soil by our attendants, a new flame at once sprang forth. The fumes were sulphureous and suffocating. Notwithstanding that phenomena of the class in question are perfectly well understood, and were described in the 'Researches in Assyria' (p. 242), as arising from chemical action, we have seen them confounded even in works recently published, having reference to the Dead Sea and its occasional emission of naphtha and petroleum or bitumen, with volcanic phenomena to which they have no relation whatsoever.

Natural fires.

Not far from the Abū Gagīr and Kirkūk Baba, both signifying the same thing ('Father of Flames,' as the spot is designated by the Arabs and Turks respectively), are several wells from which considerable quantities of naphtha and petroleum are obtained. Clear naphtha is called by the natives 'nafta abiyad,' or white naphtha; petroleum, 'kara nafta,' or black naphtha. From eight to ten gallons were said to be collected from each well per diem; they were seven in number at the time of our visit, but they might be sunk in any place over a considerable extent of ground.

Petroleum and naphtha wells.

From Kirkūk—where we had been hospitably entertained by the Mutsellim, or Turkish governor, during our stay of two days—our road lay in a nearly due easterly direction, over a low hilly country, towards Kurdistan. We crossed on the first day's journey (Sunday, February 12) three different ridges of hills, bivouacking at a ruinous and deserted khan called Gashīr, on the crest of a fourth ridge. The first of these ranges was composed of gypsum, marls, and sandstones, but the last three of sandstones, sands, and conglomerates. The valleys were watered by natural rivulets, from which we

Route from Kirkūk.

Khan Gashīr.

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gathered refreshing watercresses; the slopes of the hills with ilex, and some few myrtles and box-trees; the hills themselves were in part grassy, yet there were no people or habitations—nothing save a few herds of gazelles. We had to cut our own firewood at the deserted khan, and to take turns to keep watch by night. The estimated elevation of Kirkūk was 1,150 feet, of Khan Gashīr 2,853 feet.

Elevation of hilly ridges.

We advanced from the deserted khan across a moorland, with the village of Kurkaf in its centre, to a pass in the mountains called Deerbend-i-Basiyan. This pass is a gap in a low range of limestone hills, and is defended by a wall. Tribute or toll used to be collected at this spot, being one of the most remarkable entrances into Central Kurdistan. As we approached the pass, we met some 'sipahs' or armed Kurdish clansmen, on horseback, who expressed surprise at our venturing, in so small a party, along a road on which, they were pleased to intimate, a caravan had been plundered that very day. They were stalwart-looking fellows, and met us at a picturesque site; but as we had an officer with us from the Governor of Kirkūk, they did not offer the slightest opposition to our progress, or make any demands for a present.

Pass of Deerbend-i-Basiyan.

Party of armed Kurds.

There were several abundant springs at the pass, and others beyond, which united to form a rivulet near the village of Tubbis-spi, where we passed the night. This rivulet was one of the head tributaries of the Ta-ūk river. The inhabitants were a fine race, tall, of easy gait and flexible limbs; their features were handsome and dark, the forehead good and intellectual, and the eyes very expressive. We had some meat and rice with us from the Kirkūk bazaar, but the good people of the village said they would take some time to prepare, and they volunteered a supper of their own, which consisted of a plentiful supply of eggs and boiled wheat. Altogether we were very much pleased with our first introduction to the Kurds. Little did we dream, at the time, of the days and months we should have to spend in after-years in their society!*

Tubbis-spi.

Its inhabitants.

Valley of Alay.

The next day (February 14), we crossed over a range of limestone hills to the valley of Alay, a moorland of about a mile in width. The snows had only recently melted in this

* Mr. Ainsworth spent some months among the Kurds on a subsequent occasion. (See p. 509.)

country, and the soaked soil let the mules in up to their knees at every step. A few pink and white crocuses were, however, in flower, and there was such a profusion of hyacinths or bluebells, that I regretted not being a month later, when they would have been in flower.

Plain of Sulaimaniyah.

We had only one more ridge to cross, and we found ourselves descending to the open cultivated plain of Sulaimaniyah. From Khan Gashīr we travelled 8 hours (28 miles), to Tūbbis-spi; from Tūbbis-spi to Sulaimaniyah it was 7 hours (24½ miles). As we approached the town, we found the Pacha playing at soldiers without the precincts of the place; that is, he was sitting with two children, two Persians, an officer of the Nizam, and attendants, watching his small body of regular troops going through their platoon exercise. The sound of drum and fife in so remote a district, and where the low flat roofs made the capital of Central Kurdistan look not so much like a town as the tenement of some industrious alpine quadruped—a home of hamsters—was singular indeed. As we plunged deeper and deeper into this place, of such uninviting aspect, a few houses of better construction became visible, and a bazaar some 300 feet in length was traversed; the ruins of a small castellated building spoke of times gone by, and a palace, partly of mud and partly of brick, announced the residence of the existing Pacha.

The town.

Our reception.

We met with a kindly reception, and were ushered into what the French would call a pavilion in the palace-garden, and where, in virtue of a ticket given to the attendants, a load of wood was followed by one of rice and meat. The pilau was of colossal dimensions, and had raisins scattered on its surface, as also a few beneath; and it did honour to Kurdish hospitality, which on this occasion certainly did not show itself to be behind that of either Arabs or Turcomans.

Interview with the Pacha.

The next morning the Pacha gave us a formal reception, in the presence of his Persian friends. Our papers were examined, and as, in answer to the usual enquiry as to what brought us into these mountain districts, we replied, succinctly and truly, that we were in search of mines, 'Of what use,' said the Pacha, 'would it be to find mines here? The Persians would not allow them to be worked.' The solemn-looking Tajiks having bowed acquiescence, I remarked, that if mines

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were discovered, the Sultan would know how to vindicate his rights,—a reply which pleased the representative of the Sublime Porte mightily, so much so, that he made no attempt to conceal his gratification in the presence of the Persian envoys, but gave a loud and emphatic acquiescence. The first formal reception over, all others were totally unceremonious; and we spent the two following days in exploring the district of Sert-Chinar, Darghazin, or Shahrizur,* as it is variously designated, and the mountain regions around. The highest of the latter, part of ancient Tagros, are here called the Avroman or 'Pomegranate-water' hills. They are remarkable for their bold, rocky, and conical forms, and are capped with snow during a large portion of the year. The culminating point in the mountains was called Pir Omar Kidrun, from the Kidrun valley at Jerusalem. The estimated altitude of Sulaimaniyah was, by barometrical observation, 3,092 feet. The mean temperature of the place was, from the observation of a very abundant spring, 61°. This makes the temperature, at an elevation of 3,000 feet in the parallel of 34°, about the same as that of Malta, in the parallel of 34°·2.

The hills of Avroman.

Temperature.

Mr. Rich does not appear to have been more struck with the appearance of Sulaimaniyah than we were. 'The ordinary houses,' he says, 'are mere mud hovels, which makes the place look like a large Arab village; they are perfectly exposed, but the people do not seem to regard this, the women going about with the men, and performing their domestic labours without any veil. This miserable-looking town, however, contains six khans, five mosques, and a very fine bath, with 2,000 Mohammedan, 130 Jewish, 9 Chaldean, and 5 Armenian houses. The population of Sulaimaniyah is estimated by the best judges among the Kurds at 10,000 souls, including the officers of government and retainers of princes residing here. The ordinary citizens are of the peasant race.' It is necessary, to understand this last remark, to explain that the peasantry in Kurdistan are distinguished from the tribes or clansmen, who seldom cultivate the soil. The clannish Kurds call themselves 'sipah' or military Kurds, in contradistinction to the peasant Kurds, who are called 'Guran-rayahs' or serfs, as also 'Kunylis' or villagers.

Rich's description of Sulaimaniyah.

Peasants and clansmen.

* Kirkūk used to be the capital of Shahrizur. The actual capital is Kulambar, Sulaimaniyah being a separate pachalic.

It is surprising how little timber there is in these mountains. Only the 'tchinar,' or oriental plane, is cut between this place and Sinna, and it is floated down the Diyalah to Bagdad. Some mulberry and nut trees are also cut, but only out of orchards. It is different in Northern Kurdistan, and hence most wood is sent down from Jezīrah-ibn-Omar by the Tigris, and by the two Zabs. There are some villages of Afghans in Shahrizur, as also some families of Afshars (Nadir Shah's tribe), all political refugees. Snow lies on the ground at Sulaimaniyah, in winter, for from two to six weeks, and the cold is said to be very severe. It is equally hot in summer. Barley is reaped by the 1st of June; mulberries ripen about the same time, when cucumbers also first come in, but wheat is not cut down till the middle or end of June. Cotton, tobacco, rice, and other cereals are also cultivated, but no hemp or flax. Oranges and lemons will not stand the winter, but some castor-oil plant is grown. The grape-vine flourishes freely. Gall-nuts, honey, and other mountain products are exported to Kirkūk. Two kinds of manna ('kudrat halvassi,' divine sweetmeat) are collected—one from the dwarf oak, and another from the rocks, the latter being pure and white. When a night is unusually cool in June, the Kurds say it rains manna, as most is then found.

Timber.

Vegetable produce.

Sulaimaniyah is not an old town; it was founded, in about 1788, by one Ibrahim Pacha, who removed the capital from Kara-Tchulan, on the other side of the Azmir hills, and he called his new town Sulaimaniyah, in compliment to the then Pacha of Bagdad, Sulaiman. There was, however, an ancient mound at the site, and a village known as Malik Hindi, or 'the village of the Indian king.' Situated as it is in a hollow, about two miles from the foot of the eastern range of hills, and in a sort of ravine amidst the bare *débris* of the rocks, Sulaimaniyah is one of the least prepossessing sites in Kurdistan. Mr. Rich spent some days here in 1820, but his time was chiefly taken up with local politics and family affairs, diversified by dog and partridge fights. Sir Henry Rawlinson has added largely to our knowledge of Kurdistan, south of Sulaimaniyah, in an account of a march from Zohab, at the foot of Zagros, to Kermanshah, performed in the year 1836, and published in the ninth volume of the 'Journal of the Royal Geographical Society.' It is much to be regretted

History of Sulaimaniyah.

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that the map which accompanied the Report of the Turco-Persian Boundary Commission, presented to the House of Commons, was not printed, as it would throw much light upon many of the obscure points in the geography of these limitrophal regions.

Causes of delay.

I had arranged with Rassam to get away quietly on the morning of Friday, February 17, but travel in the East is often both dilatory and expensive. The Pacha insisted upon presenting me with a horse, for which an equivalent in kind was expected, and the innumerable attendants all looked out for liberal 'backshish.' A clansman was also to accompany us as far as Kuuy Sanjak. All these matters delayed us so long, that we were only able to effect a start and a short ride to the village of Barmudaus; but finding that place full of soldiers, we crossed the valley to Challispi, a poor village, where we obtained a sorry tenement full of lively little inhabitants, far more numerous than soldiers.

Khan-i-Miran.

The next day we travelled for six-and-a-half hours to Khan-i-Miran, the greater part of the journey lying along the foot of the giant mass of the Pīr Omar Kidrūn. We could distinguish two deep caverns on its southern face, one of which is said to have been the hermitage or home of the Said Omar of Kidrūn; and he has imparted so much sanctity to the spot, that, according to popular tradition, true believers visiting the caves are miraculously supplied with provisions. The

Cave of Diz-rud.

cave is called Diz-rud, from a village of the same name at the foot of the mountain. On this day's journey we found some highly-carburetted marls with seams of ironstone, which soon assumed a considerable development in a range of hills known as the Abd-er-Rahman, and which occupy the head of the valley beyond the Pīr Omar Kidrūn. There was nothing in these formations to induce hopes of a successful sinking for lignite-coal, one of the principal objects of our search. Two observations made this day, in two good springs, gave each a temperature of 60° as the mean of the country, and lent their corroboration to the observation made at Sulaimaniyah. On the other side of the hills, almost the only living

Zoology.

things met with had been gazelles, boars, jackals, hyenas, hares, grouse, partridges, and crows; now we had wolves and foxes in addition to jackals and hyenas; black bears, called

'manga mar' and 'gamash,' and wild goats or sheep, were said to exist in the mountains. Jerboas were as numerous at the foot of some of the wells as rabbits in a warren, and more so. There were also numerous large accipitrous birds, bustards, herons (chiefly of a black species), spurred lapwings, snipe, and starlings, to enliven the ride.

On the next day's journey (Sunday, February 19), we found the carbonaceous rocks still further developed along the base of the hills, here called Sa'rt; and they occupied the valley between them and the Kam-Shūkah hills, which are merely the prolongation of Pīr Omar Kidrūn to the north. The hollow of this valley presented the most likely spot to search for coal or lignite met with in the course of the journey. There was also much beautiful scenery in the course of this day's ride. Immediately on leaving Khan-i-Miran, and at the head of the valley of Sulaimaniyah, we passed a ruined castle designated as Kalah Khaftan. The ridge here constituted the parting line between the two watersheds—on the south to the Diyalah river, on the north to the Little Zab. In the rocky pass between the Pīr Omar Kidrūn and the bold Kam-Shūkah range was a village called Sīr-Dash, with a walled fortification or castle on the mountain side. Wood became more common; the rivulets were lined with oleander and myrtle, and blue and red anemones flowered below. Several villages were also to be seen on the skirts of the Sa'rt hills, at an elevation of some 500 or 600 feet from the valley below. The Kam-Shūkah hills were too precipitous for building, and the villages occupied nooks at the base, sometimes in the most picturesque positions. The dead appeared to be brought from all these villages, to be buried in little sacred groves of oak by the wayside, probably that wayfarers might give a passing prayer for the benefit of their souls. Many had scattered stones, more especially beautiful jaspers, which abounded in this district, over their graves. Fragments of linen and cloth were also attached to particular trees, a practice common in many countries, attesting at all events a wide-spread superstition.

The Sa'rt hills.

Ruined castle of Kalah Khaftan.

Sīr-Dash.

Kam-Shūkah hills.

Among the most beautiful of the villages was Kam-Shūkah itself. It stood at the entrance of a dark narrow ravine, with a precipice rising many hundred feet perpendicularly above.

Village of Kam-Shūkah.

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The ruins of a castle stood upon a crag that jutted over the glen or ravine, and just above it an eagle had built its nest. Beyond, a solitary square tower occupied a still more picturesque position among the rocks, and several round towers were scattered about according, apparently, as a point of command could be gained. A stream of clear water flowed through the glen, and by its sides were the huts and pleasant gardens of the red-turbaned and red-tasselled natives. The beautiful silky-haired goat of Kurdistan lay at the thresholds, or browsed amid the adjacent rocky *débris*. The castle at Kam-Shūkah was, like the one at the dividing ridge, called Sīr-Tash, or Sīr-Dash, probably signifying head-stone or rock. We find Sīr and Pīr constantly used in Kurdistan, as in Central Asia and in India, as expressive of high and exalted, but 'tash' or 'dash' is a Turkish word.* The tower opposite was called Sīr-tūk, also the name of a village farther on.

Carbonaceous deposits.

Monday, February 20.—I was engaged a considerable time in the further examination of the carbonaceous deposits; but being covered with limestones on the hills, and with vegetation in the valley, I had to limit myself to the exploration of watercourses, and that without any satisfactory results. We then proceeded to cross the Little Zab, which we did on a raft of skins, swimming the horses behind. The river is here called Tayiat or Tahiyat—not Tahiti, as marked in Kinneir's map; the ferry was called Dakan, and the village at the ferry Sīr-tūk. The remainder of the day's journey was occupied in a continuous ascent to the village of Kalka-Simmak. This was a large and beautiful village, buried in groves and orchards of figs, pomegranates, and grape-vines, and situated on a ridge only some 500 feet below the adjacent hills. Unfortunately, there had been some difficulty with the people, and the place was occupied by soldiery. We were, however, kindly received in the mosque, and were not a little amused by the son of the village Agha, followed by a train of servants, bringing in our dinner whilst evening prayers were going on. Our meals in Kurdistan consisted almost invariably of wheat boiled with sorrel and oatmeal porridge. A heavy storm passed over during the night, and the tumbledown old mosque afforded us so little protection that we were drenched

Kalka-Simmak.

* Sīr is pronounced like the first syllable in 'serious,' and Pīr as in 'period.'

in our beds. The temperature of an abundant spring, in which ablutions were performed near the mosque, was 58°·5, and the estimated elevation of the village 2,244 feet.

The country we had been traversing was peopled by the Hamūana Kurds, who were at that period in rebellion against Turkish authority. Around the Little Zab and its sources are the Bulbassi and the Lizan—next to the Bahdinan among the most powerful Kurdish tribes. Rich divides the Bulbassi into several sub-tribes—between Sulaimaniyah and Persia, the Jaffs, the Sinna, the Suratī, and the Hailan; near Rawandūz, the Arki and Akū; between Rawandūz and Sinna, the Manasp and the Khūsnawa; at Kuuy Sanjak, the Zīrar; between it and Arbil, the Disdai and Sherdi. Some of these may be merely sub-tribes. The snow-clad mountains at the head of the Little Zab were called Kandil.

Kurdish tribes.

We left Kalka-Simmak early in the morning of Wednesday, February 22, by a rugged hilly road, passing, at a distance of four miles, a village simply designated as Kalah ('The Castle'), where was a remarkable hill of ironstone and bituminous marl, with powerful veins of calcareous spar. One-and-a-half mile beyond was the village of Kīrdala; two miles farther, Sheik Hajji; and three miles beyond, Kalah Khan, with a mound of ruin; but, like the previous place, also called Kalah, it possesses no castle in the present day. Hence our road took us over the ridge of hills called Kashgar, the barometer giving an elevation of 3,286 feet to the summit-level. It was twelve miles hence to Kuuy Sanjak, passing, at the foot of the hills, the village of Hajji Kāran. Kuuy (or Koi) Sanjak ranks as a town; and although the Mutsellim placed a large and convenient apartment at our disposal, it did not suffice to accommodate the number of persons who came to see us in the evening. We had the misfortune to be, according to their account, the first Europeans who had visited their little town, and we suffered from their curiosity accordingly. It was, indeed, very late before the good people of Kuuy Sanjak could be induced to take their departure.

Hills of Kashgar.

Kuuy Sanjak.

In our latest maps of these regions the Little Zab is made to join the Tahiti of Kinneir (Tahiyat) at Kuuy Sanjak, while another tributary flows into the same river at Altūn Kupri. The Tahiyat, which we crossed at Dakan, is the only

The Little Zab.

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river strictly so speaking; the stream of Kuuy Sanjak is a mere rivulet, and it flows into the Tahiyat, or Little Zab, at or near Altūn Kupri.

Hills of Hamman Mūk.

Starting from Kuuy Sanjak, we ascended the next day (Thursday, February 23) the rocky hills of Hammam Mūk, without seeing the thermal waters from whence the place derives its name; but we visited some abundant springs called Dar-mū, which supply the town with water, and presented a temperature of 61° at an elevation of some 1,800 feet. The ascent of these hills took over an hour, and we descended thence into a valley, with vineyards and cultivation, and a little wood, but for the most part barren. At a distance of sixteen miles from Kuuy Sanjak we passed a village called

Susa.

Susa, with a rivulet; and twenty-two miles from the same place we came to a 'derbend' or pass, so narrow as just to allow space for a bridle-path and a stream of water. This pass was defended by a small castle, said to have been built by the rebellious Bey of Rawandūz in 1834. There was another castle of similar character, square with round towers at the angles, about four miles to the north-west. On issuing forth from the 'derbend' we found ourselves in a village called

Bumaspan.

Bumaspan, where we took up our quarters with the hospitable Kurd peasants.

Hot plains.

We left the hilly country at this point to enter upon the hot plains—the abomination of the Kurds, who, accustomed to the pleasant breezes, clear air, and green vegetation of their hills, cannot bear the dust and heat of the lower country. Here, as all along to the east of the Tigris, from Nineveh to Susa, the rocks crop out in the plain only as low continuous bare ridges, chiefly of red sandstones. There were, however, many pretty flowers in this warmer country, beautiful irises, dwarf pinks, green asphodel; and almond-trees in full blossom. It took us a six hours' ride (a distance of some twenty-one miles) to cross the plain and rocks to Arbil, having descended from an elevation of 2,200 to 742 feet—the altitude of Arbil on its stony plain of red sand and gravel.

The Arbil mound.

The mound of Arbil is unquestionably one of the most extensive in the country, and, crowned as it is by a castle, it has a very imposing aspect. Neither it nor its castle surpasses Kirkūk; but the latter is a rock—Arbil is probably

mainly artificial. Rich believed it to be a burial-place of the Arsacidæ. It is about 150 feet high, and 300 or 400 yards in diameter. The town of Arbil is situated principally on the south side of the mound, and was once as large as modern Bagdad. Some portion of the town is situated on the mount, or in what is called the castle. Arbil contains the usual mosques, baths, caravanserais, and bazaars. On the east, a little to the north of the town, is a hollow called the Valley of Tchekunem, where it is said Tamerlane's tent was pitched when he besieged Arbil. A holy sheikh of Arbil struck a panic into his army, which began to disperse; and Tamerlane is reported to have cried out in Persian, 'Tchekunem?' that is, 'What shall I do?' and this gave name to the valley or hollow.

Town of Arbil.

Tchekunem valley

Saturday, February 25.—Our road lay now over a comparatively level plain, the seat of many historical events of great interest. We were reapproaching the line of retreat of the Ten Thousand Greeks, which we had parted from at the Nahr-wan, and we were upon the scene of Alexander the Great's triumphs over Darius, more than three centuries afterwards. From these remote times to the present the fine open plains, extending between the Tigris, the Great Zab, and the rocky hills to the east, have been the scene of numberless conflicts and struggles for power and dominion. Above all, we were approaching the great centre of Assyrian pomp and pride.

Line of Xenophon's retreat.

A ride of twelve miles took us to the village of Kurda-Shahir, evidently once a town; three miles beyond was the village of Tūb-sū, and two miles farther the Great Zab. This river was crossed, like the Little Zab, by means of rafts on skins, and the ferrymen were Yezidi or Izedi Kurds, dwelling at Kelek Izidi, or the 'Izidi's ford,' on the left bank, the village of Kafra being on the right bank. The river was not more than 400 feet in width, but from two to three fathoms deep, with a rapid current. The Great Zab carries, indeed, an enormous body of water to the Tigris, yet it is fordable at several places at certain seasons of the year. It also abounds in fish, and is hence much resorted to by pelicans and cormorants.

Great Zab river.

Sunday, February 26.—Travelled eight miles to the River

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Khalis, the Bumadus of the historians of Alexander the Great, and seven miles farther came to the Christian villages of Kara-Kūsh and Karmalissi, the last of which has been identified by some with the Guagamela (or Gangamela) of the Macedonians. Strabo states that the word Gangamela means 'Camel's house,' and that it was so called because Darius gave the place for support and nourishment of one of his camels, which was much wearied with the march.* Each of the two forms admits of explanation: the first might be derived from Khan or Khaneh, the second from Gāh, 'a place.' Darius left his baggage and treasure at Arbela when he advanced to give battle beyond the Lycus to Alexander. The Great Zab was called the Lycus, or wolf, and the Lesser Zab the Caprus, or goat, from some fanciful peculiarities in their modes of proceeding. Xenophon, however, called the Greater Zab, Zabatus, and the Khazir, or Gomar- (Kūmar-) sū, was simply designated as a valley made by a torrent. This was, however, at the low season, and when the Greeks were able to ford the River Zab, not (as I first supposed) at Kelek Kupar, higher up than Kelek Izidi, but at a ford discovered by Layard below Kelek Izidi, and yet above the junction of the Khazīr-sū.†

Ancient geography.

Birtulli.

We stopped at the Chaldean village of Birtulli, 'the younger son,' expressive of a village more recent than Karmalissi; and being Sunday we attended divine service, which was performed within the enclosure, but outside of the walls of the only existing church. Birtulli boasted once of its three churches, but two are now in ruins. An old man pointed to a scar on his forehead, the relics of a wound which he said he had received in defending the sacred edifices. They had no pictures within the church. Outside, the men stood in front, the women in the rear, and all joined vociferously in the hymns. The cultivation around these Chaldean villages was better attended to than any I had seen before, yet these poor peasants had much to contend against, the soil being infested with mimosa, *Ononis* or restharrow, and the long-rooted *Glycyrrhiza*, or liquorice plant. The villages of Mohammedans, on the Assyrian plain, are all built of mud, the

* Strabo, xvi. 737.

† 'Commentary on the Anabasis of Xenophon,' attached to the Rev. J. S. Watson's 'Anabasis,' p. 304. (Bohn, 1854.)

Chaldean Christian villages of stone, but they are also in a very ruinous condition.

Arrival at Mosūl.

We rode fourteen miles from Birtulli to Mosūl, on Monday, February 27. As Mr. Rassam's relatives lived at this place, and he had not seen them for many years, we remained here till Friday, March 17, during which interval I occupied myself in making a reconnaissance of the mounds of Nineveh; in a trip to Nimrūd, at the junction of the Tigris and Zab, the scene of Mr. Layard's subsequent important archæological explorations; in examining the sulphur springs near Mosūl, exploring the town itself, and determining the character of the surrounding country, as far as Ain-el-Safra, or 'the yellow spring,' and the remarkable mountain mass known as the Jebel Maklub—the Mons Nicator of Alexander's historians. It is but due to Mr. Rich, to say that he was one of the first to carry on archæological explorations in the mounds of Nineveh; but his researches were mere scratches in the soil, compared to what has since been accomplished by the industry of Monsieur Botta and Mr. Layard. The various questions connected with the retreat of the Ten Thousand, in this part of the country, have been treated of in my 'Travels in the Track of the Ten Thousand,' and the geological results have appeared in my 'Researches in Assyria,' &c.—both works emanating from enquiries made mainly in the course of the Euphrates Expedition, and published under the auspices of General Chesney.

Researches of Botta and Layard.

The difficult questions that have arisen from the various readings of the 'Inscriptions,' by Sir Henry Rawlinson, Dr. Hincks, and Mr. Layard, in reference to the Assyrian and Biblical names of Nimrūd, have been discussed in the 'Commentary,' subsequently published, and attached to the Rev. J. S. Watson's edition of the 'Anabasis.' Some account of Mosūl has also been given in my 'Travels in Asia Minor,' &c., which contain the results of an expedition, sent by the Royal Geographical Society and the Society for Promoting Christian Knowledge, to the Chaldean or Nestorian Christians in Northern Kurdistan. My companion, Mr. Rassam, was subsequently appointed British Vice-Consul at Mosūl, and he has shown, by his intimate knowledge of the resources of the country, that there is an opening for several English commercial houses at this great emporium of Kurdistan and the

Mosūl.

Mr. C. A. Rassam.

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Mr. Hormuzd Rassam.

central Tigris. His brother Hormuzd became Mr. Layard's right-hand man in his explorations, and subsequently received an appointment at Aden. He was sent on a mission to Abyssinia in 1865, where he eventually shared the captivity of those victims of the Emperor Theodore's caprice, whose liberation he had hoped to effect.*

Crossing the River Tigris, and issuing forth by the north gate of Nineveh, we at length effected a start on Friday, March 17, and, accompanied by Mr. Rassam's friends, reached

Tel-Kaif.

the Chaldean village of Tel-Kaif. A species of scorzonera or tragopogon abounded on the plain at this season of the year, and afforded a large succulent root, which, dressed like asparagus, constituted a wholesome and delicious food.

We got off betimes the next morning, passing, at 3½ miles, Takiyah, an Arab village with tents; at 4½ miles beyond that

Journey to Dalib.

Kaikī, a large village of Mussulmans, with about 100 huts and numerous storks: then Binara, a small village of about 20 houses (3½ miles); Hansiyan, an Arab village of 50 houses; Tel Baspī, another village of Arabs; Bash-ak, 'Head of white water,' a village of 70 houses, with an oleander-clad rivulet, and a ridge of sandstone hills beyond. On the other side Baydiya, then a whole group of villages of Izīdī Kurds, including Bahdinan, Kraypa, Rūbar, Ta-ūk, and Dalib. We put up at the last of these, having ridden some thirty miles. Most of these villages were adorned with tombs or propitiatory monuments characteristic of the Izīdīs, and which had square bases with conical tops—the latter tapering to a point, at first in horizontal circles, and then fluted vertically. The monastery of Rabbeh Hormūzd, at the foot of the hills to the right, constituted a remarkable object during part of this day's ride, and we could distinguish the ruins of Eski, or 'Old' Mosul (which I visited on a subsequent occasion), on the right bank of the Tigris.

We were detained all Sunday, March 19, at Dalib, by a continuous downpour of rain; the next day was no better, but we nevertheless pushed on, by—first a village called Kawass, inhabited by Slīvanī Kurds; secondly, the village of Urūk; and, thirdly, the village of Asī, to, finally, the village of Turkashā, where we put up for the night (Tuesday, March

* Mr. Hormuzd Rassam has returned to England with Sir Robert Napier's expedition.

21). If we had reason to complain yesterday of the uniformity of the road, we were rewarded this day by a picturesque ascent of the Jebel Abiyad, or 'White Mountains,' with rocky acclivities wooded at points, and with the fruit-trees of our orchards, including pear and apple, growing wild and in full bloom. It took us exactly an hour to reach the crest of the range, and we found the country to be broken up, well wooded, and well watered. The vegetation consisted chiefly of ilex, or dwarf evergreen oak, with some juniper, mimosas, flowering almond and laburnum, and oleander along the course of the rivulets. With the water rendered more abundant by the recent rains, the mass of verdure, and the many flowering plants, the scene in this limited rocky region was one of exceeding beauty.

Scenery of Jebel Abiyad.

Zakhū, with its lofty castle rising out of the huts of the peasantry, is still what it was in the days of Xenophon, a palace or chieftain's stronghold, with (as in feudal times) a few cottages grouped around it. The population was given to me as 300 houses of Mohammedans, 100 of Izīdīs, 12 of Jacobite Syrians, and 5 of Chaldeans. The Christians had two churches, that of the Virgin Mary and that of St. George, the latter being now in ruins. The Khabūr river is crossed by a bridge of three arches, built on rocks about half a mile east of the town. It is nearly 30 feet high, and the arches have a span of 40 feet. The river forms rapids at this point. Travelling over the grassy plain—the old 'Romaion Ager'—the ensuing day (Wednesday, March 22) we came to another river at a distance of eight or nine miles, called the Khazīl, where we had to be ferried over on rafts—a very dilatory proceeding. The current was so rapid that, although not above 60 feet in width, the rafts were carried down some distance before a landing could be effected. We did not, in consequence of the delay thus incurred, get beyond the small Chaldean village of Tel Kabbin, which had a church in ruins, the interior of which looked more like a dungeon than a place of worship.

Castle of Zakhū.

River Khabūr.

Rapid current of the Khazīl.

The next day we left this splendid plain, which is hemmed in by the Jebel Abiyad on the one side, the Jebel Jūdī—one of the traditional resting-places of the Ark—on the other, is backed by snow-clad mountains, and terminates at its widest end on the River Tigris, and kept along the banks of the latter

Jebel Jūdī.

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river to Jezīrah-ibn-Omar. The plain was dotted with villages, and there were several Kurdish castles at the foot or on the slopes of the distant hills. The point where the hills came down to the riverside was in particular defended by a fine old castle, called Rubara or Rabahī, within which was another ruinous structure of more recent times. This appears to be the Rabdium of the Byzantines and Tūr Rabdin of the Jīhan Numa, in the neighbourhood of which was the 'Romaion Ager.' The Khabūr and Khazīl rivers unite, before flowing into the Tigris, to form the Pīr-ē-Khabūr or Pīr-i-Shapūr. The ruins of an ancient bridge are seen crossing the Tigris a short distance below Jezīrah-ibn-Omar.

Castle of Rubara.

Jezīrah-ibn-Omar.

The fortified town or castle which bears the latter name is situated at the foot of the hills, and below the point where, as Xenophon graphically described it, the craggy mountains of the Karduchians hung over the river. It has, from the peculiarity of its position, at the first pass up the river south of the mountains, been at all times a strategical point of importance to each successive dominant power. The Beit Zabda of the older Chaldeans and Syrians, the Romans modified its name into Bezabde, and the Khalif Omar constructed the bridge or dyke which left to the place its present name.

An incident of the journey.

A curious incident occurred on our approach to Jezīrah. The road lay on the slope of the hills, with a precipitous cliff on the left, and then a long stretch of gravel and verdure to the river. I got off my horse to examine the cliff, and descended to its base. I was soon rewarded by finding a cave with a deliciously cool spring of water within. The temperature was 66°, showing a difference of 5° in the mean annual temperature between Sulaimāniyah and Al-Jezīrah. A little farther on I found among the rocky *débris* at the foot of the precipice a spinning-wheel, then a copper pot, and soon a whole collection of domestic utensils. I had never seen such geological specimens before, and was filled with wonder. The explanation only presented itself after joining the rest of the party, when we met the inhabitants of Mansunīyah—a Christian village on the left bank of the Tigris—in full flight with the remainder of their household lares and penates. The Kurds, they said, were upon them. We persevered onwards, nevertheless, but a little

beyond the village we came up with some mounted and armed men—clansmen of the Nestorian tribes—who had come down to give the alarm. They told us it was impossible to continue on our projected road through the mountains by Fenik (a line of country I traversed upon a subsequent occasion), as the Kurds were up in arms; so we had no alternative but to retrace our steps and cross the river to Jezīrah. These mountain warriors were well-dressed, well-accoutred, and remarkably fine men.

Jezīrah. Jezīrah stands on a peninsula or island of the river, whence its name, but its old Roman walls climb up the precipices in the rear. It is a miserably poor place at the present day, with few inhabitants and no trade. The rocks are here of volcanic origin, and the whole extent of country beyond to Tel Sa-Khan, a distance of 39 to 40 miles, was of a similar character—a bare, bleak, stony region, with little vegetation and no cultivation or inhabitants. Wolves that were prowling among the loose stones close by us seemed to be as unconcerned at our presence as the hyenas are in Southern Persia. This stony region was bounded to the north by the Ba'arim hills —the ancient Masius—also of volcanic origin. These hills, which do not attain an elevation of above 800 feet above the uplands, advance in a westerly direction to near Nisibīn, when they turn off by Dara towards Mardīn, uniting with the Jebel Tūr.

Beyond Tel Sa-Khan, however, the volcanic rocks are succeeded by limestones, on a knoll of which was a castle formerly inhabited by a noted robber named Halīlah, but who was made prisoner by Reschid Pacha and sent to Constantinople. Beyond this castle the hills lower rapidly down to the Plain of Nisibīn, which was the chief scene of the exploits of the freebooting chieftain, being the line of the highroad from Constantinople to Bagdad. Descending upon this plain, we arrived in the evening of Sunday, March 26, at the ruins of what was once the chief city of Mygdonia, and long an advanced outpost of the Romans against the East. It is first mentioned in history under the name of Antiocheia, in the march of Antiochus against the Satrap Molon;* in the later wars between the Romans and Parthians

Plain of Nisibīn.

* Polyb., v. 51.

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Ancient history of Nisibīn.

it was constantly taken and retaken. Thus it was wrested by Lucullus from the brother of Tigranes, after a long siege, which lasted the whole summer,* but according to Plutarch towards the close of the autumn, without much resistance from the enemy. Again it was taken by the Romans under Trajan, and was the cause of the title of 'Parthicus,' which the Senate decreed to that emperor.† If, as is suggested by General Chesney, Trajan built his boats here to descend to the Lower Euphrates by the Mygdonius, they must have been very small, for the river is a mere streamlet. It, however, receives large tributaries a little farther to the south-west, and that may have been the point in question. Nisibīn appears to have been subsequently besieged by the Osroeni (people of Orfah) and other tribes who had revolted, but who were subdued by the arms of Septimus Severus. Nisibīn became on this occasion the head-quarters of Severus.‡ From this period, it appears to have remained, with Bezabde on the Tigris, an advanced outpost of the Romans, till it was surrendered to the Persians on the treaty which was made with that people by Jovian after the death of Julian.§

Ruins of ancient Nisibīn.

The ruins of ancient Nisibīn occupy an area of about a square mile. They are, however, mere fragments of buildings. Five columns alone stand erect. Two have Corinthian capitals, and still support an entablature. One has a capital just tumbling off—the other two are broken. An old Christian church, called Mar Yakūb, had luckily preserved some fine specimens of Roman sculpture in its structure. I copied here a mutilated inscription, as well as the circumstances would permit:—

Inscription in a church.

++ΛΝΗΓΕ××ΗΟ+++ΤΙ×•
ΗΡΙΟΝΙΟΝΙΟΥΧΟ××
ΠΡΘC×ΧΤΘΕΟΥ ΟΙ
ΟΠΟΥCΠΟΥΔΗΛΚΕΥΥΜΑΤ
××ΔΥCΛΟΧΕΝΧΒΡΟ××
ΤΕΝΑΤΕΛΥΠΟΟΝΩΝ××××
ΠΟΝΤΟΥΘΥ

Near the monastery was a more modern mosque, dedicated to Zīn-al-Abidīn, 'the best of hermits,' although not the first

* Dion Cassius, xxxv. 6, 7.
† Ibid. lxviii. 23.
‡ Ibid. lxxv. 2, 3.
§ Zosim. iii. 33; Amm. Marc. xxv. 9.

we had met with on our travels who was so designated. An Arab village occupied the south-east corner of the ruins, and on the modern highway was a caravanserai, a small bazaar, and a few houses which seem, from subsequent experience, to be inhabited or tenantless according to the state of the country, whether in peace or in rebellion. Nisibīn was once the centre of a very extensive trade, and one of the great emporia for the merchandise of the East and West.* How it has fallen off, like all the other great cities of the East, under the misrule of the Mahommedans! It may be said that the change of lines of commerce may have had as much to do with the decline of the place as misrule; but Nisibīn is still upon a highway of trade, which would be much more frequented if even tolerably safe. As it is, what between the Kurds of the Ba'arīm Hills, the Izīdis of the Singar, and the roving Arabs, all of whom look upon merchants as their lawful prey, it is necessary to travel in a body or caravan between Mardin and Mosūl to secure a safe transit.

Trade of Nisibīn.

We rode the next day (Monday, March 27) across the plain and then into the hills to Dara, where a modern village affording us accommodation for the night, we spent the afternoon in a rough reconnaissance of the ruins. These are indeed very extensive, owing probably to the combined causes of the edifices having been constructed of compact limestone or marble, and to their being in the hills, removed from the highway. The chief ruins are—first, the acropolis, situated at the highest part of the town, having the modern village of Dara in front, or south of it, and three large cistern by the side. The river of Dara, a tributary to the Mygdonius, flows past the hill to the south, where are the remains of an ancient dam and reservoir. It then flows through the walls which start from the foot of the acropolis hill in a westerly direction, curving round to the south to flow out by another water-gate. The remains of a bridge are met with immediately above the gate; below and outside the gate is a mill. Close by to the west is the principal gateway or entrance to the city, the road leading to the bridge. Near the gate is a handsome and massive tomb. The slope of the hill below the acropolis is

Village of Dara.

River of Dara.

* Julian 'Orat.' i. p. 27; Justin 'Excerpt. e Legat.' p. 173; Procop. 'Bell. Persic.' i. 11.

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Modern and ancient Dara.

covered with ruins of houses, and beyond the river are various structures belonging to a Mahommedan town, which once existed within the precincts of ancient Dara. These include a mosque with minareh, a mansion and a tower, and this part of the hill terminates in low cliffs over the wall. These cliffs are dotted with sepulchral grottoes. There are ten towers, seven square and three circular, between the two water-gates, and one circular tower beyond; but only two square towers west of the central water-gate, and at the north-west extremity of the wall are the ruins of a temple, and of a large bastion in part cut in solid rock. In the westerly portion of the precincts, ruins of a still larger temple exist, close by which are some domed vaults, and at the foot of this westerly hill are the remains of a large mansion or palace with what were supposed to be granaries, but which may have been barracks, in front. These last structures fronted the chief entrance.

There was a small village in the rear of the palace, as well as in front of the acropolis. A quarry and sepulchral grottoes existed some little distance to the eastward, but the chief necropolis was in the cliffs to the westward, where we counted over 500 tombs, many of them grottoes with ornamental façades. Some of these were elaborately sculptured with cypresses, birds, and other devices. They were evidently in some instances Sassanian, for we found the usual genius of good with wings and scroll, or Kustī, as also the representations of fire-temples. On one we read part of a

Imperfect inscription.

mutilated inscription—VITOKNAHE OK OVTOVEO, and on another the word MONHOI. The palace was in utter ruin, but the granaries or barracks had a vaulted entrance 80 feet long, with three flights of steps into a vast apartment supported by four square pillars with arches. The apartment was 80 feet long by 156 feet 19 inches wide, with recesses about 6 feet high.

History of Dara.

Dara—or Daras, as it is written by Procopius—played an important part in the wars of the Lower Empire, and of the Sassanian dynasty. According to the historian of the Persian wars, it was raised from a village to a city by the Emperor Anastasius, who gave it his own name, and called it Anastasiopolis. Procopius also gave a full account of the way in

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which Daras was fortified,* and which Gibbon has remarked may be considered as representing the military architecture of the age. Procopius also gives an account of a marvellous fountain of water, whose source, on a neighbouring height, was in such a position that the supply could not be cut off by an enemy, while, at the same time, it was distributed through the town to the inhabitants by various channels, no one knowing whither it went on reaching the outer walls.† It is probable that the reservoir at the foot of the acropolis is here alluded to, for we have seen how the river turns from thence to run in a curious winding manner through the town. There may, however, be a rock-spring above the town which escaped our notice; but if so, it would be at such a distance (for we sketched the whole place) as not to be easily prevented being cut off by the enemy, whilst the reservoir provided a certain and defensible supply.

Marvellous fountain.

Procopius also mentions a series of combats which took place under the walls of Daras, between the Romans under Belisarius and the Persians,‡ by which the Romans maintained the town, owing to the admirable military dispositions of Belisarius. Daras fell at last into the hands of the Persians during the reign of Justin II. (A.D. 574), after a memorable siege of six months by Chosroes II.§ The campaign of Marcian took place in the eighth year of Justin, and the result of the fall of Daras was the disgrace of the general, a truce with the Persians, and the appointment of Tiberius as an associate in the empire.

Combats between Romans and Persians.

Theophanes ‖ says that the general who took Daras, and subsequently concluded the above-mentioned peace, was Hormuzd IV., who succeeded Chosroes. It is not a little curious that a writer in Smith's 'Dictionary of Greek and Roman Geography,'¶ says D'Anville,** has tried, but we think in vain, to find any town or ruins which may mark the site of Daras. Surely the many who have travelled along the high-road from Bagdad to Constantinople must have seen the ruins of Daras, if only from a distance?

* 'Bell. Persic.' ii. 13.
† 'Bell. Goth.' iv. 7.
‡ 'Bell. Persic.' i. 13.
§ Theophyl. 'Hist. Maur.' iii. 9, 10.
‖ Ap. Phot. Cod. 64; Evagr. v. 8–10.
¶ Art. 'Daras.'
** 'L'Euphrate et le Tigre,' p. 53.

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Mardin.

A short ride of eighteen miles took us next day (Tuesday, March 28) to Mardin. There were no villages on the first part of the journey, but as we approached the hills, we passed Kur Harīn-ūrth-a-tel, a village of Christians called Kuldi, and a mosque with minareh attached, which was designated as Kuzar or Kosar. On a subsequent occasion, keeping along the high-road, we saw a ruined castle on the same plain, called Kasr Burj, in which, according to a tradition related to us by a Chaldean bishop, a son of Darius once lived, and on the same plain, in front of Dara, was a large granary, known as Aubur Dara. There was a further castle called Kasr Sir-khan. We found the three Persian princes—Kuli Mirza, Majaf Mirza, and Taimur Mirza—who had been on a visit to England, located at Mardin, on their way back to Bahdad, and we spent the evening with them, talking of Farsistan.

Its monasteries.

The next day (Wednesday, March 29) was devoted to a visit to a group of monasteries, situated in a hilly and rocky recess in the Jebel Tur, about four miles east of the town. The chief of these monasteries, once the residence of the celebrated historian Abu'l Faraj, was appropriately called Dar-i-Safran, or the 'yellow monastery,' from the colour of the surrounding nummulitic limestones. Mar Gregorius Abulfaragius, also called Gregorius Bar-hebræus, was born in 1226, at Malatiyah; and after being Bishop of Aleppo, he was elected Patriarch or Primate of all the Jacobite Christians in the East, in 1266, when he resided at Dar-i-Safran. This monastery was a spacious building, which contained three churches - one dedicated to the Virgin Mary, another to Yakūb (St. James), and the third to Zīzail. One, I believe, was claimed by the Syrian Romanists, the other by the Jacobites, and the third by the Syro-Chaldeans. These churches were much ornamented, and we were also shown a vaulted chamber reserved for the sepulture of the patriarchs.

Calendar of Events.

There is preserved in this monastery a Calendar of Events, which is written in three columns—one devoted to theology and ecclesiastical affairs, another to history, and a third to philosophy and literature. It was begun by Abu'l Faraj in Syro-Chaldean, the chapters being headed in Estranghelo; it was continued in Syriac, and latterly it is written in Kur-

shunī, or Arabic written in Syriac characters. It is the duty of each successive patriarch to keep this record up to the times, but, considering the utter ignorance of the outer world in which these poor monks live, it must be a strange compilation. Mr. Rassam kindly copied for me the names of fourteen of the Kings of Nineveh, as recorded in this curious manuscript. These were: 1. Ninus, contemporary with Abraham; 2. Damaus; 3. Belaus, contemporary with Jacob; 4. Mamlus, epoch of Egyptian bondage; 5. Skatris; 6. Amontis, epoch of Moses and of Ramsis (Rameses) in Egypt; 7. Alapris; 8. Semperidus; 9. Susarius; 10. Sempirus; 11. Susarmus; 12. Metrus; 13. Tutanis; 14. Totanus. This list would puzzle Sir Henry Rawlinson, or even our friend Mr. Bosanquet.

Kings of Nineveh.

Leaving Dar-i-Safran, we ascended the cliffs to Dar-i-Yakub, a mere series of galleries and grottoes hewn out of the perpendicular face of the rock; in some of which the water, dribbling through the vaults, was collected in pear-shaped cavities, covered over with a single large stone. Not far from these untenanted hermitages, was another so-called monastery of the Holy Lady (Dar-i-Suyīdī), similarly situated. There was a church attached to the latter, which we reached by a gallery hewn out of the face of the rock. It is still in use, but no monks lived in the grottoes. The gardens of the monks were disposed in terraces, and appeared to be well kept.

Dar-i-Yakub.

Between Mardin and Dar-i-Safran we passed a Christian village called Kalah Ma'arah, or 'woman's castle,' with a church dedicated to St. George. The castle whence the village derives its name is now a ruin on a precipitous hill to the south, and to the north-east of the monastery was Dar-i-Kirikus, or the monastery of St. George, and the Christian village of Binabi. All these villages had their gardens and vineyards, and the peasants seemed as happy and cheerful as their rocky homes were pleasant and picturesque to look at.

Kalah Ma'arah.

We left Mardin the next day (Friday, March 31) by a hilly country, the slopes often covered with ilex, the valleys mostly cultivated, the course of the rivulets being marked by poplar and willow-trees, and the whole enlivened at this season of the year by flowering almond-trees. We were, as usual,

Leave Mardin.

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detained in the morning, and only succeeded in effecting a five hours' ride to Sheikh Khan, a mere cavern, walled in and made to serve as a caravanserai, with a deserted village close by. We travelled for two and a quarter hours next morning before we came to a village where we could get a draught of milk. An hour farther was Khan Kajurin, and a little beyond, Kuh Tuz, a village at a point where the country began to open. The hills were less abrupt, the valleys more extensive, and cultivation more general. The ruins of Kalah Dar-zuwar occupied the summit of an adjacent hill. Passing Khan Kajuri, we came to Ak-bunar, the 'clear or white spring,' where we were to have put up; but the khan being occupied by the Pacha of Mardin and his retinue, we rode aside to a village called Tanspin Teppeh. From this point one of those stony uplands of volcanic origin, so common in Northern Mesopotamia, extended all the way to Diyarbekr, a distance of eighteen miles, where we arrived on the afternoon of Sunday, April 2. The bends of the River Tigris alone afforded variety to the journey, and five miles from the city of Diyarbekr we passed Sharukhi, village and mill, with a bridge, with the villages of Kajuri on the opposite side, and Kabî Kuuy to the north.

Sheikh Khan.

Diyarbekr.

Diyarbekr stands upon basaltic rocks which rise high and precipitously above the River Tigris, and on its right bank, is chiefly remarkable for its lofty well-built walls, defended by towers, some of which are rectangular, others semicircular. They are, however, of various sizes and heights. On the east or river side, the walls are lower than elsewhere, being built upon the edge of a somewhat precipitous line of rock. The walls are also in a much better condition in some parts than in others. As in most other Oriental cities, the walls and towers appear to have been erected at various periods, as seen by the fragments of old structures built into them. Some of the towers are ornamented by designs of lions and suns, and have Greek, Latin, and Kufic inscriptions, commemorative, probably, of their respective builders or repairers. The gates are four in number, and are very massive—the Dagh Kapi, or 'Mountain gate,' on the north; the Rum Kapi, or Roman gate, on the west; the Mardin gate, on the south; and the Yanï Kapi, or 'New gate,'

Its walls and towers.

The gates.

on the east. The city contains about 57 jamis and musjids—the former, as before observed, being a superior description of mosque, having one or more minarehs attached to it. There is also a Chaldean church, the district of Diyarbekr being a Chaldean episcopate, and an Armenian church dedicated to Surp Gregorio, or Saint Gregory. Several ancient but ruined buildings are met with in the town, which also boasts of some large and handsome khans and baths. Hasan Pacha Khan, close to the great mosque, is especially a handsome building. One of the most curious monuments in Diyarbekr (ancient Arnida) are the remains of what Texier deemed to be the ancient palace of Tigranes, afterwards occupied by Shapūr II. The citadel occupies the north-east angle of the town, and has two gates. Within it is the seraï, palace, or Pacha's residence, a poor building. Adjoining the seraï is a high rectangular tower, to which a mosque is attached, but which is itself supposed to have been the belfry of a Christian church. The town is supplied with water from the westward by an aqueduct, which is carried through the walls between the Rum and Dagh Kapis. Close to this point, inside the town, is a tank, about five or six feet deep, formed by a spring issuing from the rock, and which contains fish which are deemed to be sacred—as at Orfah, Membij, and other places. We have now a resident consul at Diyarbekr. Mr. Taylor, the first consul, and Mr. Holmes, who succeeded him, have been both distinguished for their archæological attainments; and much has been done by the distinguished French archæologist, M. Texier, as also by Mr. Garden, assisted by M. Jaba, Russian consul at Erzerum, towards exploring the city and neighbourhood of Diyarbekr, and deciphering some of the numerous inscriptions.*

Mosques.

Churches.

The citadel.

Scientific explorers.

Hafiz Pacha, subsequently the unfortunate commander of the Turkish army at Nizib, was busy, at the epoch of our visit, making preparations for a campaign against the Sinjarlis. He was much interested with mineralogical enquiries; and having collected some of the sands of the river, which abound in iserine or magnetic iron, he was so delighted at seeing the facility with which the iron could be separated from the sand

Hafiz Pacha.

* 'Journal of the Royal Geographical Society,' vol. xxxv. p. 21; vol. xxxvii. p. 182; and 'Proceedings,' vol. ix. No. 11, and vol. xi. No. 11.

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by a magnet, that he insisted upon our mounting at once, and proceeding with him through the town and out of the Mardin gate, down to the banks of the river, to see the iron *in situ*. He had also a collection of copper ores, including a beautiful piece of malachite from the mines of Arghana; and he was exceedingly anxious that I should remain in the country, and superintend the working of the copper-mines; but I did not feel myself, being at that time attached to the Euphrates Expedition, at liberty to accept the offer.

With Mr. Rassam's kind assistance I obtained some curious extracts from an old Chaldean and Arabic dictionary preserved in the Syrian church of Saint Bethune, as also from some old historical works, also preserved in the same monastery. In one of these (Baluli's Dictionary) Calah was identified with Al-Hadhr, Arbil with Rehoboth (Rehoboth-Ir), and Larissa with Resen (Bochart's old identification).

Set out to visit the mines.

We left Diyarbekr on Wednesday, April 5, provided with horses and an official attendant by the hospitable Pacha, to visit the mines, a courier having also been despatched in advance. We were, as usual, late in getting away, and did not therefore arrive at our halting-place—Shirbat or 'Sherbet' Khan, also called Murad Sultan's Khan—till two hours after dark. Our ride lay for five long hours over the same dreary, stony, volcanic country that led up to Diyarbekr from the south, and which probably stretches to the Karajia Tagh to the west.

Beyond the khan the character of the country underwent an entire change, the volcanic rocks being succeeded by limestones, sandstones, and marls, which rise in successive ranges towards the culminating-point of Arghana.

Town of Arghana.

The town of Arghana was, by barometer, at an elevation above the sea of 3,074 feet; and on the same hill, called Kalah Dagh, or 'Castle hill,' was a sepulchral chapel, some 400 feet above the town, called Tūl Kaphal, and said to contain the bones of a holy Christian; but, like the reputed tomb of the Prophet Jonah at Nineveh, and many others, claimed by the Mohammedans. At the southern extremity of the hill was the Armenian monastery of the Virgin Mary, ornamented with tiles as well as paintings, and with sculptures over the doorway. Arghana constituted our halting-place on Thursday,

April 6, and on the 7th we rode to Madan Kapur, or the copper-mines, the most productive of all in the Ottoman Empire. On our way we found the sedimentary formations much broken up by diallage rocks metamorphosed at places, and containing highly carbonised shales. It is, indeed, very uncertain if lignite deposits do not occur in this part of the Taurus which would be worth sinking for; but a minute account of the structure of the chain at this point is given, with detailed sections, in my 'Researches,' &c., and need not, therefore, be repeated here. Copper abounds to such an extent in the mining district that we actually detected powerful veins of pyrites in the watercourses. The copper is transported hence to Tokat, to be smelted; and it is not a little amusing to read in some speculative schemes for railways across Asia Minor, recently published, of the copper-mines of Tokat as among the incentives to investment. We spent no less than four days exploring the mines and the adjacent hills, in the latter of which I had strong hopes of meeting with deposits of lignite coal, but without success.

Copper-mines.

At length, on Wednesday, April 12, we started to continue our journey, passing Khan Ujah (four hours from Arghana Madan) and the plain of Ali-ūda to the beautiful lake called Kūr-jik Kūli (ancient Colchis), which constitutes one of the sources of the Western Tigris. At its south-east extremity was a snow-clad mountain called Azara. Mr. Taylor has since discovered the true sources of the Tigris, or of its eastern branch, called Zibeneh, in a subterranean passage or cave near Eggil (ancient Inghilene), as also memorial tablets of the Assyrian kings, the character of which has been explained by Sir Henry Rawlinson.* Mr. Taylor also claims to have discovered the oft-disputed site of Tigranocerta at the ruins of Kefer-jūz (pronounced Kafir-jūz), near the Jacobite town of Madiyat in the Mæsius.

Sources of the Tigris.

The westerly tributaries of the Tigris are divided from the waters flowing into the Euphrates by a ridge of hills, called, from the pass, Dawah Būaïnī, the crest of which attained, by barometrical observation, an elevation of 4,246 feet, or about 700 feet above the lake. The descent hence led us into the fine large cultivated plain of Kharpūt Dawassi, dotted with

Pass of Dawah Būaïnī.

* 'Proceedings of the Royal Geographical Society,' vol. ix. No. 11.

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Kharpūt.

villages, and communicating with another more limited plain, out of which rose a bold and almost isolated rock, bearing the town and castle of Kharpūt on its summit. We passed the night of April 12 at the village of Kūnk, on the Kharpūt Dawassi, and that of Thursday, April 13, at Kharpūt itself, exploring the castle, the neighbouring ruins and village of Sar-īk, and the barracks and modern erections on the plain below.

Cedrenus* notices this ancient stronghold under the name of Χάρποτε. It was called by the Syrians *Khurtbist* (D'Anville writes it *Charbist*; Herbelot, *Khartabist*; and Asseman, *Haretbaret*). There is every reason to believe it to be the Carcathiocerta of Strabo (xi. p. 527) and Pliny (vi. 10); which was the capital of Sophene, one of the cantons of Armenia. Mr. Taylor has also brought to light, from an Armenian author, that the two crusading chiefs, Baldwin de Bourg, Count of Edessa (Orfah), and Jocelyn de Courtnay, having been made prisoners by Sickman ibn Artuk, Jocelyn was imprisoned at Hesn Keyf, or Hisn Kaif (first brought to notice by Captain Lynch), on the Tigris, and Baldwin at Mosul; that, after being liberated, they were again made prisoners with Waleran, a kinsman of Jocelyn's, and all three were incarcerated at Kharpūt, whence they were set at liberty by a valiant band of Armenians of Behesni. Balak, grandson of Artūk, having recaptured the castle, he destroyed, according to Matthew of Edessa and Abu'l Fada, all his prisoners, consisting of sixty-five men and eighty 'beautiful ladies,' by throwing them over the battlements into the plain below.† The castle of Kharpūt has thus a melancholy interest attached to it even in the eyes of Europeans: and when we consider that these regions were the great battle-field between the Romans and Persians during the early centuries of the Christian era; that it was across these hilly districts that the frontier of the two kingdoms ran; and that there were constant sieges of forts, and skirmishes and marches, along its whole extent, which have been partially recorded by the historians of the Lower Empire, its walls would, if they could speak, relate probably many another sad and dismal story.

Crusading reminiscences.

* 'Hist. Comp.' vol. ii. p. 686.

† 'Journal of the Royal Geographical Society,' vol. xxxv. p. 34.

Friday, April 14.—Crossed the plain of Kul-wansh, with several villages buried in gardens and orchards, and a rivulet in its centre, to Khutal; and then came the next day to a narrow band of hornblende rocks, amid limestones which repose at Gūmesh Ma'dan 'silver-mines,' or Kapan Ma'dan, as they are also called, upon mica and chlorite slates tilted up by granite. The most productive silver veins are met with at the junction of the mica schists and the limestones. The town of Kapar itself is situated on granite rock, below the mines and on the left bank of the River Euphrates. We spent two days here, thoroughly exploring the mines, from which we obtained many interesting minerals, among which were chlorides of silver and red sulphuret of silver and antimony. Our explorations were not unaccompanied by danger, for the galleries were carried in places through steatitic clays and carbonaceous marls without any proper support, and there were also large caverns in the rock with crystalline gypsum in drusic cavities. We also obtained sulphate of copper, carbonate of lead, and arsenates of lead, copper, and silver. These mines, which are at once numerous and extensive, were said to yield 13,000 maunds or 195,000 lbs. of lead, and 400 okas or 1,000 lbs. of silver annually. 130 maunds or 1,950 lbs. of argentiferous galena were said to yield 2½ to 3 okas, 6 to 7 lbs. (6 okas to the maund) of silver. There were twelve furnaces.

Gūmesh Ma'dan and Kapan Ma'dan mines.

Tuesday, April 18.—Crossing the Euphrates, which flows past the hills from N. 80° E. to S. 30° W., curving round nearly due south, we found ourselves still in a granitic country with a lofty mountain, which had been long visible, called Azi Kūr, to the NW. The granites were, however, soon succeeded by limestones and chalk, with basaltic rocks; and the country became more cultivated and dotted with villages, at one of which, called Kūr-tchn, we put up for the night. The next day (Wednesday, April 19) was occupied in passing over the Kūl Dagh, or 'lake mountain,' volcanic, with limestones, and upon which were still many patches of snow; and then descending the same to the town of Arab Kir, or Arab Kail, as it is commonly called, a straggling place with a population of about 8,000 souls, of whom 6,000 are Armenians, consisting chiefly of cottages embosomed in orchards and gardens, with groves of plane, poplar, and willow

Granitic country.

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Mountains of Arab Baba.

Wednesday, April 19.—Had to cross another range of mountains (Arab Baba) beyond Arab Kir, with patches of snow and many pretty flowering plants; then to descend to a valley with a river, which was crossed by a bridge, close by which was a khan; then to ascend a still loftier range called Ayalī, with large patches of snow, which our horses ate greedily, but they were much frightened at finding it give way to their feet. Timber trees were now becoming more common, and there were extensive forests on some of the mountain slopes. The view from the crest was very comprehensive, including a vast extent of hilly country; but the roads were so bad that we could not descend without moonlight, when the long silent file of travellers wending their way on the steep side of a mountain precipice presented a striking scene. It was late before we got to a village called Bīrastīk, where we had great difficulty in obtaining accommodation. It took us six hours the ensuing day (Friday, April 21) to cross another range with patches of snow, and descend to the town of Diurīk, like Arab Kir, composed of houses scattered amid gardens and orchards, but on a far more extensive plain or valley, at a lower level, and watered by the Akma Chai, a tributary to the Euphrates.

Bīrastīk.

Snow-capt mountains.

We found the snow lying in continuous masses on these mountains at an elevation of 6,000 feet, and in patches about 5,500 feet on the south side, and as low as 5,000 feet on the northern. We spent Saturday, April 22, at Diurīk, exploring the neighbouring iron-mines, and we were perfectly astonished at their productiveness. The magnetic or native iron lay in boulders, with others of granite and syenite on chalk. Some of these boulders were three feet long by a foot and a half in thickness, and the quantity seemed almost inexhaustible. Diurīk is a town of about 10,000 inhabitants, of whom 2,000 are said to be Christians. It is impossible to obtain correct information, or anything but an approximation to the real truth in regard to the population of Eastern towns, even from the authorities. They do not wish it to be precisely known how many heads they have it in their power to tax. The ruins of a castle occupied the summit of a rock to the west, and there was also a small castle on the cliffs on the opposite side of the river. The porch of the

Diurīk.

jami of Diurīk is one of the most beautiful specimens of the florid Saracenic that we had met with. The same edifice contained a 'mihrab,' or pulpit, of excellent workmanship.

Geological features of the country.

It took us the whole of Sunday, April 23, to cross the lofty Dumbugh Dagh, the country presenting so many features of geological and mineralogical interest that it was impossible to get on. First we had limestone, with a great variety of diallage rocks, containing oligiste or specular iron *in sitû*, so that what occurs in boulders in the valley might easily be wrought at the fountain-head; then we had granitic and syenitic rocks, one bed of the former of which, of a light pink colour, I found to be rich in disseminated gold. We stopped at the village of Siliski, situated on the Kumar Sū, with a bridge in the valley below, the inhabitants of which were engaged in smelting iron ore actually in their own houses.* The same afternoon I examined some hills to the north, of most varied structure, but chiefly steaschists and serpentines, with beds of diallage and actynolitic rock, in which I found veins of sulphuret of silver and curious pisolitic chalcedony. I never was in a country so rich in minerals, and only regret that I had not the means of testing the river-sands, which were rich in iserine, for gold, by means of quicksilver. If a mere hasty examination, such as I was able to give to it, produced such remarkable results, what might not be done by a more minute and careful exploration? Every formation in the neighbourhood abounded in its own peculiar minerals; the granites in gold and precious stones, the steaschists and serpentines in silver ores, the limestones in iron, and the very watercourses were choked with useful minerals.

Siliski.

Country beyond Siliski.

Beyond Siliski, these various rocks, so rich in minerals, were, however, succeeded by non-metalliferous gaps, beds of gypsum, alternating with sandstones at the Valley of Sinjan, and extending all the way to Yarbasan and to the foot of the Kara Bel mountains—the ancient Paryadres. The mountain torrents, meeting with little or no opposition from these friable sedimentary deposits, often coursed through subterranean channels, passing beneath precipices and reappearing at short distances—sometimes falling in cascades into yawning

* The Kumar Sū joins the river of Divrik, and together they flow into the Euphrates.

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chasms below, at others leaving natural arches, over which we rode in perfect safety whilst the waters foamed beneath us.

Reluctant accommodation at Yarbasan.

Siujan (or Sinkasi) and Siftak were Kurd villages defended by walls with towers; and Yarbasan was inhabited by the same people, who, tyrannised over in these countries by the Osmanlis, were not only loth to accommodate our party, but wanted actually to drive us out of the village. There was no other village, however, this side of the Kara Bel, so we were obliged to force ourselves upon the reluctant peasants, who were neither sparing of threats nor abuse.

The next day (Tuesday, April 25) was spent in crossing the wooded Kara Bel. At first we came to mere coppices of ilex and juniper; but these were soon succeeded by pine forests, which occupied the crest and slopes of the hills. The hills themselves were composed of the usual diallage rocks, with outlying sandstones, marls, and gypsum. It was a bad day—hail and rain, with thunder and lightning; and the caravan had to wend its way up the mountains in single file, amid the din of elements and the roar of a hundred torrents, rushing from the rocky reservoirs of snow above and around us.

Village of Kutni.

Luckily we got in the evening to Kutni, a village of hospitable Armenians, where we were enabled to dry our clothes and refresh the inner man. It took us ten hours to cross this mountain chain, and, had it been a fine day, it would unquestionably have been a very beautiful ride.

Kutni was at the foot of the hills, and at the head of the great central plain of Sivas. Crossing this plain the ensuing day (Wednesday, April 26), we passed several villages, and lakes abounding in geese, ducks, herons, and other birds.

Salt lakes.

Some of these lakes were salt, and probably all that are not dried up in summer are so; for the sandstones of Sivas were more or less saliferous, and the Halys, which has its sources from the country eastward, derives its well-known occasional saline character from flowing in its upper part through the same formations.*

Visiting the Pacha next day, we found him distributing

* This is further evidenced by names of places—as Tuzli Kuli, 'the Salt Lake;' and Tuzli Hinar, 'Castle of Salt.' The river Kizil Irmak, 'Red River' or Halys, which is here crossed by a bridge, was at this point over 200 feet in width.

cloaks of office to sundry Aghas, or governors of villages and districts—the ceremony being enlivened by the pranks of a fool, who shook a stick with bells attached to it. The scene was altogether more suggestive of the Middle Ages than of the nineteenth century. Hafiz Pacha and Izzet Mohammed Pacha, of Angora, were men far more in advance of their time than the Pacha of Sivas. The town or city—which was said, in round numbers, to contain 5,000 Mohammedan and 1,000 Armenian houses—does a considerable business in cereals, which constitute the chief produce of the plain; for at an elevation of nigh 5,000 feet above the level of the sea neither mulberries, grapes, nor pomegranates were said to flourish.

Visit to the Pacha.

The old wells of the city no longer exist; but there are ruins of two castles of different epochs, one of which appears to have belonged to the Kings of Pontus, to have been strengthened by the Romans, and dilapidated by the wars with the Mohammedans, who again built it up on former ruins; the other is a ruder structure, apparently of the Osmanli era. There is also a large Christian monastery, which was erected to celebrate the well-known martyrdom of the 'Forty of Sivas.'

Castellated ruins.

Sivas was, it is necessary to observe, the ancient Sebasteia, which, being near the frontier, Pliny regarded as not belonging to Pontus, but to Colopene in Cappadocia.* The town existed, as a small place, before the dominion of the Romans in these parts, but its ancient name is unknown. The present one is a corruption of Sebaste, just like the well-known Suez, or Sivas, on the Red Sea. Pompey increased the town, and gave it the name of Megalopolis; † and during the imperial *régime* it appears to have risen to considerable importance, so that in the later division of the Empire it was made the capital of Armenia Minor. It is also mentioned as a large and flourishing town of Cappadocia in the time of the Byzantine Empire; and the Emperor Justinian is described by Procopius ‡ as having restored its walls.

Sivas.

The identity of Sebasteia with the modern Sivas is established partly by the resemblance of names, and partly by the

Ancient Sebasteia.

* Pliny, vi. 3; Ptol. v. 6, § 10; Hieroc. p. 702; St. Antonin. pp. 204, 205.
† Strab. xii. p. 560. ‡ 'De Ædif.' iii. 4.

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agreement of the site of Sivas with the description of Gregory of Nyssa, who states that the town was situated in the Valley of the Halys. A small stream, moreover, flowed through the town, and fell into a neighbouring lake, which communicated with the Halys.* In the 'Itinerary' its name appears in the form of Sevastea, and in Abu'l Fada it is actually written Sivas, or Siwas. The mediæval history of Sivas is given in my 'Travels in Asia Minor,' &c. (vol. ii. p. 12). I had at that time identified the place with Cabira, but better authorities seem to identify that place with Niksar (Neo-Cæsarea). It is curious, however, that Strabo places Cabira 40 stadia from the Paryadres, and that Pythodoris, the widow of King Polemo, gave it the name of Sebaste.

Journey to Kharīm.

Saturday, April 29.—Crossed over a low hilly district (fourteen miles) to the village of Bab-ladi; thence across a cultivated valley, with villages and orchards, to Kharīm, our resting-place for the night. We observed some terns of an ash-grey colour fishing in a rivulet in the course of the day's ride,† during which we had a high conical mountain, called Yūldūz Tagh, or 'Mountain of Stars,' to the right. Hamilton‡ identifies this mountain with Caenonchorion, mentioned by Strabo as a fortress 200 stadia from Cabira (Niksār?), being a precipitous rock, having a fountain at the top, and its base washed by a deep river, and one of the strongholds of Mithridates, situated in a most inhospitable district. A stream of water is said to flow from Yūldūz Tagh, which has also a river called Yūldūz Chai at its base.

'Mountains of Fir.'

Sunday (April 30) was spent in crossing the Chamlū Bel, or 'Mountains of Fir,' the ancient Sandisses, and which, as the modern name indicates, were covered with pine-forests. It took us four hours to ride to the crest, which was 5,260 feet above the level of the sea, patches of snow occurring on the northern and western acclivities. On the descent we met with singular masses of coarse white marble, and a rivulet passed under a magnificent arch of rock through which a coach might have been driven. The cavern thus formed was

* Orat. i. in xl. Mart. p. 501; Orat. ii. p. 510; compare Basil M. Epist. viii.

† This must be a country rich in fish, for on a subsequent occasion I met with pelicans and black storks in the same district.

‡ 'Researches in Assyria, Babylonia, and Chaldea,' vol. i. p. 347.

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tenanted by innumerable pigeons. We passed the night at the village of Būlaz, and had but a short ride, the next day, to the beautiful town of Tokat, embosomed among wood-clad hills, the houses stretching out amid gardens and orchards, with the fine open and cultivated valley of the Yashil Irmak (or Iris) beyond, and several castellated buildings on the hills around.

Tokat.

Seen from the south, or from the valley of Iris, Tokat, with its ruined castle picturesquely situated on a steep ridge of limestone rocks to the west, and the whole town, with its pretty houses, with tiled roofs, stretching up a lateral valley, and extending into other valleys which diverge in various directions, embosomed in gardens, presents even a still more striking appearance. The town appeared to Hamilton to be mean and dirty; but coming, as we did, from Sivas, it did not so impress us, either now, or on a subsequent visit made to the same place.* The Bazistan, or chief bazaar, is solidly built of stone. The population is variously estimated. The Christians are, however, in greater number than the Mohammedans; it is *supposed* that there are about 1,000 Armenians and Greeks to 800 Mohammedans. This, however, seems to be rendered doubtful by the fact that the latter have some fifteen jamēs and mashids (small mosques), whilst the Armenians have only one good church. There are several fine old khans and hammams or baths. The steep and craggy pinnacles of the castle rock are surmounted by fragments of ruined battlements and towers, and on the southern scarp are several natural and artificial caverns—probably sepulchral grottoes. A flight of steps is found halfway up, penetrating into the centre of the mountain, probably to a reservoir; and we found several great stone cannon-balls lying about at the foot of the rock.

Its population.

Ruins.

Ancient Tokat.

It is not certain what ancient place Tokat represents. Strabo described the Iris as flowing through Comana Pontica and the fertile plain Daximonitis, and then turning to the north at Gaziura (Turkhal). In the book on the Alexandrine War (c. 35), a lofty range of hills, covered with forests, is said to extend from Pontic Comana to Armenia Minor. This description would correspond to the position of Tokat, but

* 'Travels in the Track of the Ten Thousand,' vol. ii. p. 17.

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Hamilton * discovered remains of an ancient town and bridge on the Iris, higher up than Tokat, and which, being called 'Gumenek' (Kumanak), have been adopted as representing Comana. Tokat may represent Talaura, a mountain fortress in Pontus, to which Mithridates withdrew with his most precious treasures, which were afterwards found there by Lucullus.†

Its modern name is, however, derived from the Empress Eudocia, during whose widowhood, and the minority of her sons, Comana fell into the hands of the Turks, against whom Diogenes Romanus sent an army, under Ruselius, and subsequently under other generals. It is found in many old maps marked as Eudoxiaria and Eutochia. Tokat evidently became a place favoured by the Turks, for we find one of its chiefs, called Ahmid Allah-id-Dīn, styling himself Sultan in the time of Bayazīd. In the year 1471 Yusuf Bey, a general of Uzūn Hasan, Prince of Kaisariyah, invaded the district of Tokat, but he was defeated by Mustafah, a Seljukiyan general. Tokat ultimately fell into the hands of the Osmanlis in the time of Selim I.‡

Cultivated valley.

Wednesday, May 3.—We enjoyed the (to us) rare felicity of riding for an hour beyond Tokat in a valley with a good road, houses, gardens, and mulberry plantations, which would have reminded us of the best parts of Europe, but that there were no smiling peasantry to gladden the scene; the women were not visible, and as to the few peasants met with, they had a scowling and discontented appearance. Yet is Tokat a place much favoured by nature; it produces silk, and a great variety of fruits and vegetables, and the Armenians manufacture a very fair wine—a thing we had not tasted since we left Bagdad, although we got *raki* at Diyarbekr, and a little *rosoglio* at Sivas.

Aken Tagh.

Passing over the Aken Tagh, chiefly mica-slates and limestones, covered with oak and pine, we entered valleys with plane, beech, and alder trees, and occasional pear, apple, and medlars. These, however, grew apart, and not in groves, affecting particular localities. After six hours' rather laborious travel we arrived at Sar-pīn, inhabited by charcoal-burners.

Sar-pīn.

* 'Researches in Assyria,' &c. vol. i. p. 450.

† Dion Cassius, xxxv. 14; Appian. Mithrid. p. 115.

‡ A.D. 1514; Hejira 921.

This village alone was said to supply the copper furnaces of Tokat with 15,000 loads of charcoal annually; but upwards of 65,000 loads were said to be contributed by the woody region we had been travelling over, and which is known as the Katan Dawassī—ancient Daximonitis.* We made a lateral excursion hence, by a picturesque and wooded ravine, to the village of Kardavin, where, according to report, a gold-mine had been recently discovered. It turned out, however, to be merely mica, or talc, which assumed an unusual appearance at this place.

Thursday, May 4.—Our way lay along the same beautiful hilly and wooded country, with open, cultivated, and well-watered plains and valleys, 21 miles to Turkhal, a small place of about 500 or 600 houses, remarkable for its ruinous castle, situated on the top of an isolated hill of limestone. The gateways of this castle consist of large blocks of stone, the lintels, side-posts, and threshold being formed each of a single block. The ruins are, however, apparently of a late period. A flight of stairs leads here, as at Tokat and Amasiyah, to a subterranean well or reservoir. Hamilton, who pictured this place in his work, identifies it with Gazioura, an ancient royal residence, and described by Strabo as being near the spot where the Iris, after flowing through the rich plain of Daximonitis, turns towards the north. Dion Cassius also notices the same place as the stronghold where Mithridates took up his position against the Roman Triarius.† Turkhal.

Following the valley of the Yashil Irmak, or 'Green River,' for about three miles, we turned up a narrow valley for about seven miles farther, and then crossed a ridge by a road in part cut through the rock (Uzun Bughaz), and where was a guardhouse with five soldiers, and implements of torture hanging over the door, as if the soldiery united the functions of policemen and magistrates. We descended hence into a cultivated valley with several villages, in one of which (called Asin Burghu) we put up for the night, having ridden altogether thirteen hours. Village of Asin Burghu.

The next day (Friday, May 5), it took us two hours to

* Strabo, xii. 547; Dion Cassius, xxxv. 12.

† Ibid. It is called Kashan Kalahsi in the 'Jihan Numa.'

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cross another ridge of hills, with a pass also in part cut through the rocks. Hence we descended into a pleasant vale, with cottages tiled as at Tokat, mulberry plantations, vineyards, and orchards, and which constitutes a kind of suburb to Amasiyah. Amasiyah, a city which we reached soon afterwards, curving round bare limestone rocks, with artificial channels for water hewn out near their bases.* The castle and acropolis of the chief city of Pontus are situated on the summit of a lofty limestone rock on the opposite side of Yashil Irmak, the banks of which are fringed with gardens for some distance from the town, and are irrigated by large water-wheels. The narrow pass by which the river sweeps down to the city itself; the gloomy-looking sepulchral grottoes of the Kings of Pontus, high up on the face of the cliff, but below the castle; the Saracenic buildings, either in ruins or used as mosques, which line the principal street; and the houses, chiefly of stone, creeping up the rocky sides, as if in search of a resting-place, give to Amasiyah a very remarkable appearance.

Strabo's account of ancient Amasia.

Strabo, who was a native of Amasia, has left us a graphic description of his birthplace. 'Our city,' he says, 'lies in a deep and extensive gorge, through which the River Iris flows; and it is wonderfully constructed both by art and by nature, being adapted to serve the purpose both of a city and of a fort. For there is a lofty rock, steep on all sides, and descending abruptly to the river; this rock has its wall in one direction on the brink of the river, at that part where the city is connected with it; and in the other direction, the wall runs up the hill on each side of the heights; and the heights are two, naturally connected with one another, very strongly fortified by towers—and within this enclosure are the palace and the tombs of the kings; but the heights have a very narrow neck, the ascent to which is an altitude of five or six stadia on each side, as one goes up from the bank of the river and the suburbs; and from the neck to the heights there remains another ascent of a stadium, steep, and capable of resisting any attack. The rock also contains within it water-cisterns, which an enemy cannot get possession of, there being two galleries cut—one leading to the river, and

* This mountain and aqueducts have a legend of Firhad attached to them, which is related by Hamilton (*i.* 373), and was corroborated by Mr. Rassam.

the other to the neck; there are bridges over the river—one from the city to the suburb, and another from the suburb to the neighbouring country, for at the point where this bridge is the mountain which lies above the rock terminates.'

Hamilton explored the acropolis and tombs, and he explains * the five or six stadia to mean the length of the road by which alone the summit can be reached, and which is circuitous. The same traveller, however, erroneously follows Cramer † in giving the version, 'the summits have on each side a very narrow neck of land,' for the words 'on each side' refer to the ascent to the 'neck,' as Groskurd and Long correctly understand it. Hamilton found two Hellenic towers, of beautiful construction, on the heights, which he considered to be the *κορυφαί* of Strabo. But the greater part of the walls now standing are Byzantine or Turkish. Indeed, we learn from Procopius ‡ that Justinian repaired them.

Hamilton's researches.

Hamilton also explored a passage cut in the rock, down which he descended, about 300 feet, to a small pool of clear cold water. The other gallery, he says, was not excavated in the rock, but was built of masonry above-ground, yet equally well concealed. The tombs are five in number, three to the west, and two to the east. Considerable remains of the old Greek wells, which Strabo describes as forming the peribolus or enclosure of the royal tombs, still exist, as also a square tower, built in the best Hellenic style. Hamilton also found the front wall of an old morgue to be built of ancient cornices, friezes, and architraves, as also fragments of Greek inscriptions, deep cut in large letters.§

The population of Amasiyah is said to consist of from 3,000 to 4,000 Turkish houses, 750 Armenian, and 100 to 150 Greek. Silk is the staple production, and 50,000 'okas' are said to be annually exported, the price being about 10*s.* 6*d.* a pound. Cloth and leather are also manufactured, but the bazaars are small and poorly supplied.

Population of Amasiyah.

It is but a short ride of six hours—although reckoned eight by postmasters, and to be paid for as such—from Amasiyah to

Journey to Marzivan.

* 'Residence in Asia Minor,' &c., i. 366.

† Ibid. i. 302. ‡ 'De Ædif.' iii. 7.

§ The mediæval history of Amasiyah is given in the 'Researches in Assyria, &c. vol. ii. p. 26 *et seq.*

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Marzivan; and the journey consists simply of an ascent by a valley east of the acropolis rock, but having a southerly course, and then to the south-west across the cultivated upland to the town, which is itself situated at the south-western extremity of the plain. Marzivan—the Rhazemon of the Lower Empire—is inhabited chiefly by industrious Armenians, who work in copper. The town itself is surrounded by walnut and other fruit-trees, and there are many villages on the plain.

Hagi Kuuy.

Sunday, May 7.—The Plain of Marzivan descended to the westward to the Mohammedan village of Hagi Kuuy, which boasted of a jami, or mosque, with minareh. A range of hills lay farther west, in which a vein of argentiferous galena was worked, and which was said to produce 144 okas of silver annually. It took us seven hours to reach Manzie Kushiki, or Ashiki, a posthouse, with a few soldiers in log-huts in a rather narrow valley. One of the guards died the night of our arrival, from dysentery.

The ensuing day, our way lay for three hours along the same valley, which increased in picturesque beauty as we descended. In parts the road is hewn out of the cliffs, and in others paved. Cliffs, trees (many of the latter fallen down), and caverns succeeded one another, and there were also additional guardhouses, for, like most passes, it has not a good reputation; till at length we reached a more open country, and crossing another ridge in a north-westerly direction, we

Osmanjik.

came, amid gardens, orchards, and vineyards, to Osmanjik, on the Halys. This pretty little town consists of some 300 houses, charmingly situated at the foot of rocky pinnacles, in the centre and loftiest of which are the ruins of one if not two castles. The pinnacle to the east had sepulchral grottoes hewn in its face, while the westerly rocky cones were monopolised by storks. The castle is said to have been built (but probably only repaired) by Bayazid, in order to keep in check a rebellious satrap at Kastamuni; and the same Sultan is said to have built the noble bridge which crosses the Halys at this point, and which has no less than thirteen arches, being 283 yards long and eight yards in width. Osmanjik, or the 'Little Osman,' has five mosques, two or three with minarehs, a good khan and bath, and close by is a place of pilgrimage, known

as the Takiya of Hajji Baba, or the 'Tomb of the Pilgrim Father.'

Route from Osmanjik.

It is a pleasant ride—charged as eight post-hours, but not above sixteen miles—from Osmanjik to Haji-Hamsah, along the left bank of the Halys, with wooded and picturesque cliffs on the one side, and verdure or cultivation, extending down to the river, on the other. At Haji-Hamsah the road leaves the river to pass through the hills by a narrow 'derbend,' or pass, which presents the remarkable peculiarity of enabling the traveller to reach the low country beyond without any change of level. As the same hills extend, under various names, with but few breaks, or solution of continuity, to the south of the Sea of Marmora, any railway projected to be carried across Asia Minor should keep to the high-road to this point, whence, by following the wide and open valley of the Halys, it could gain the central uplands by a graduated and easy ascent.

Haji-Hamsah.

Haji-Hamsah is a curious place, with about 500 cottages, many coffee-houses, a khan, a 'jami' with minareh, post-house, a diminutive bazaar, guardhouse, and Agha's residence. Beyond the town a modern fort nearly blocks up the pass. The road issues forth beyond the pass into the valley of the Divrīk Chai, fertile and productive in rice, cereals, and fruit, and with many villages; it preserves the same characters, only deeply intersected at places by mountain torrents, as far as the town of Tusiyah, a place of some importance. Patches of snow still lay on the mountains, both to the north and south. Those to the north were designated as Al-Kūz (Olgassys), and to the south Kush-Tagh, or 'Bird Mountains.' Near the town is a high artificial mound, possibly the site of the castle in which Diogenes Romanus took refuge when liberated by Sultan Hasan, during the prevalence of the faction of Michael. At that time Tusiyah was called Docia. It first fell into the hands of the Seljukiyan Turks in the time of Manuel Comnenus, when it was placed under the rule of the Isfindaburg princes of Kastamuni, and it passed under the sway of the Osmanlis in the time of Mohammed I.

Kutch-Hissar.

We rode thirty miles the ensuing day (Thursday, May 11), up the same beautiful woodland vale, to the small town of Kutch-Hissar, or 'Ram's Castle,' but surrounded by populous

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suburbs and villages. The exactions of the highwaymen everywhere drive the people into the villages. Beyond Kutch-Hissar the country rises up to a volcanic region, which divides the waters of the Tusiyah and Baiardar rivers, and where are the well-named towns of Karawiran, 'The Black Ruin,' and Karaula, 'The Blacker.' The long valley we had been ascending from Haji-Hamsah, and which is altogether some seventy miles in extent, was not unknown to the old geographers, who called the river Doros, and the district that of Cimiatene. Ptolemy places Andrapa, or Neo-Clandiopolis, east or south-east of Olgassys. Colonel Leake has identified Karaula with Anadynata of the Tables, from the distances given from Gangra. But Karawiran appears to be the more ancient site, and the ruins of an old castle, with wells of black basalt, crown the summit of a low hill close by.

Karaula.

Ancient Anadynata.

It is eight hours by post from Kutch-Hissar to Karawiran, and three hours from Karawiran to Karaula, sometimes called Kara-Jila. Beyond the latter place a better road leads to Tcharkish or Tcherkesh, which we reached (on Friday, May 12), after a ride of thirteen hours. Tcharkish is a small posting-town, with a bazaar, which, with the 'jami' and khan, are walled in, whilst the houses are without the enclosure. Leake has identified this place with the ancient Antoniopolis, or Antiniopolis. It is certainly an ancient site, for we found fragments of columns with Ionic capitals about two miles before reaching the town, the ruins probably of a guard-house or temple; and similar ruins are met with at the entrance of a pass about three miles beyond the town, where is a modern guardhouse. Roman milestones are also met with occasionally along this road, but most have been removed to Turkish cemeteries.

Tcharkish.

Ancient Antoniopolis.

Beyond Tcharkish the country was marshy, and abounded in waterfowl, till we came to the foot of the hills with guardhouse and ruins. We descended hence to the River Hammamli, which is crossed by a wooden bridge to the village of the same name—an abbreviation of Hammam Ali. There were the ruins here of a fort and seraï, which were not many years back held by one Haji Achmet Oghlu, a partisan of Shapwan Oghlu, who attempted to re-establish

Hammamli river.

Turcoman supremacy in these parts. We had to change horses here, which entailed a loss of two hours, and then proceeded by Bayardir—now a mere village, but identified by Leake with the ancient Potamia—up another ascent, and thence by a small lake, celebrated for its leeches, to the town of Karadah, or Keredeh (ancient Carno). Karadah is a busy little town, with a fair bazaar, and is said to have a population of about 15,000 souls, of whom 3,000 are Christians. Wishing to get on more expeditiously to Constantinople, Mr. Rassam left the more valuable and heavy portion of our luggage with a Christian merchant at this place, who faithfully promised to forward it after us; but he signally failed in his promise, and the luggage has never since been recovered.

Ancient Potamia.

Loss of luggage.

Although detained next morning by heavy rain, we started at noon, and got over twelve post-hours to Boli. The country was in part clad with wood, in part under cultivation, but there were several slight ascents and descents, and some small lakes. A guardhouse (which was also a coffee-house) by the wayside, was built in part of slabs of old marble, and there were other fragments of ruins lying about. Boli is a goodly town, with a population of some 10,000 souls, of whom some 3,000 are Greeks. It is the seat of a pacha, and the see of a Greek bishop; and the ruins of two castles or mounds to the eastward, and numerous fragments of antiquity, mark the site of Hadrianopolis of old.

Town of Boli.

We ascended (Tuesday, May 16) from the magnificent wooded plain of Boli, up forest-clad hills, by a road in part paved, and descended thence to a smaller plain with more greensward and many trees, at or about the centre of which was the village and posthouse of Tūz-cha. The plain, though not to be compared with that of Boli, was surrounded by wooded hills, had its own little lake and rivulet, and presented altogether a site of exceeding beauty. Numerous fragments of antiquity were scattered about, to mark the site of ancient Duseprum, twelve post-hours from Hadrianopolis. The capital of a column, lying near a well, was ornamented with doves encircled by wreaths.

Plain of Tūz-cha.

It was seven post-hours from hence to Khandall, but twelve by order of the Padishah, as the Manzil Khan men had the

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impudence to assert. The road lay first across the plain, and then over low wooded hills. Khandall itself is a small post-

Khandall.

town, with a khan, jami, and small bazaar. It is well named 'the ditch,' for a rivulet flowed through the only street. Fragments of columns and antique hewn stones attest the existence of a former site—probably a guardhouse. This was our journey of Wednesday, May 17, and the ensuing day we proceeded over a country of morasses, the road being in

Sangarius river.

part a wooden causeway, to the River Sangarius (Sakarīya), where are the remains of a handsome bridge of seven arches, 1,087 feet in length, carried over what is now the dry bed of the river, and a wooden bridge over the actual bed of the river, which was 372 feet in width, but of inconsiderable depth.

Sabanjah.

Sabanjah, the Sohon of the Lower Empire, is a mere travelling station, with the usual manzie-khan, coffee-houses, and mosque with minareh. It is, however, prettily situated amid gigantic plane-trees, and with greensward stretching down to the beautiful lake of the same name, on the shores of which we on several occasions took up our stations, in preference to a dirty interior. There are the usual fragments of olden times scattered about. It is evident, indeed, that from the Halys all the towns and sites in the highroad to Persia, and to Mesopotamia and Babylonia, had been more or less adorned; whereas, beyond the Halys, what relics are met with are, with some few exceptions, of a more defensive character. Even Strabo, speaking of the Olgassys, says the surrounding country was filled with temples erected by the Paphlagonians (xii. p. 562); and it is possible, from existing relics, to

Journey from Constantinople to the Halys:

imagine the journey from Constantinople to the Halys to have been carried, in the palmy days of the Byzantine Empire, through the most fertile regions on the earth's surface, by thriving towns and marble guardhouses, causeways, and beauteous wood-shaded temples.

It is needless to dwell upon the beauty of Ismid (ancient Nicomedia), which occupies a truly imperial situation—partly on the slope of a wooded height, partly at its foot, and at the head of the Gulf of the Sea of Marmora, known as Astacus. It has been since the head-quarters of a regiment of British cavalry, and may be said to have been brought within the pale of modern civilization. Would that the same might

extend farther east! The introduction of railroads can alone effect this desirable change. In Europe railroads have been the last result of civilisation, and iron roads have been introduced across countries where a great population holds out promises of numerous travellers and of a considerable transport of merchandise. But India and the United States have set the example of a new order of ideas. In those countries the railway is made a means of communication between distant cities and provinces, or to establish relationship between countries. It is made to precede civilisation, instead of following it in the van, and experience has shown that settlement and cultivation, villages and towns, follow in its wake. This is the idea which remains to be applied alike to British North America and to the East. Railways from Belgrade to Constantinople, and from Constantinople to Teheran and Bagdad, would revolutionise a considerable portion of Western Asia, and revive in those countries the civilisation of olden times.

Reflections.

It only remains to say that we rode from Sabanjah on Friday, May 19, to Nicomedia, and on Saturday, May 20, to Scutari—the scene, since that epoch, of many stirring events.

Conclusion.

APPENDIX XII.

BIOGRAPHICAL RECORDS OF OFFICERS OF THE EUPHRATES EXPEDITION.

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THE following brief records of the services of the principal officers of the Euphrates Expedition, compiled from official and other sources, with a few biographical details, may not be out of place in completing this narrative. This addition to the work has been chiefly prepared by Mr. D. H. Workman, to whom, in addition to others in Messrs. Spottiswoode's establishment, I feel greatly indebted for the exceeding care and attention which they have given to these pages while going through the press, especially with regard to the difficulties caused by Eastern names:—

THE LATE MAJOR-GENERAL J. B. B. ESTCOURT.

WE extract from 'Hardwicke's Annual Biography' for 1856 the following account (slightly altered) of the officer who was third in command of the Euphrates Expedition:—Died on June 23, 1855, in camp before Sebastopol, of cholera, in his 53rd year, Major-General James Bucknall Bucknall-Estcourt, Adjutant-General of Her Majesty's Forces in the Crimea. He was born in 1802, and was the second son of the late Thomas Grimston Bucknall-Estcourt, Esq., D.C.L., of Estcourt, co. Gloucester, M.P. for the University of Oxford, by Eleanor, daughter of James Sutton, Esq., of New Park, Wilts. His elder brother is the present Right Hon. Thomas Henry Sutton Sotheron-Estcourt, late M.P. for North Wilts. The late Major-General Estcourt entered the army as ensign in 1820, became lieutenant in 1824, captain of the 43rd Foot in the following year, and major in the same regiment in 1836. From 1835 to 1837 he served in the Expedition to the River Euphrates, and for his exer-

tions in that service he was promoted to the brevet rank of lieutenant-colonel, in March 1839. He was placed on half-pay in 1843; and in the same year was appointed Commissioner, to mark the boundary between the United States and the British provinces in North America, a work which he completed in three years. Promoted to the rank of colonel in 1854,* he went out to the East in that year on the staff of Lord Raglan, and served as Adjutant-General from the first landing in the Crimea, sharing the glories and dangers of Alma, Balaklava, and Inkerman. He had enjoyed tolerably good health during the campaign, but died of cholera after a brief illness. The late Major-General Estcourt was named for K.C.B. in the 'London Gazette' of July 10, 1855, but his death had occurred before his nomination. He sat during the last Parliament for Devizes, having been elected for that borough in February 1848, but retired at the dissolution in 1852. He married, in 1837, Caroline, youngest daughter of the late Right Hon. Reginald Pole Carew, of East Anthony, Cornwall, by his second wife, the Hon. Caroline Anne, daughter of the first Lord Lyttelton. His widow is now Lady Bucknall-Estcourt, of Eaton Place, London, she having been raised, in 1856, to the same rank as if her husband had survived to be created K.C.B., to which he was gazetted before his death was known in England.

THE LATE LIEUTENANT MURPHY, R.E.

LIEUTENANT HASTINGS F. MURPHY obtained his first commission in the Royal Engineers in 1816. He was employed at Dover and other stations till 1823, when he was selected by Colonel Colby for employment on the Ordnance Survey. His first duty was the reduction of the Observations of the Scotch Triangulation, in which he displayed considerable mathematical knowledge, as well as great assiduity. It may be worthy of notice, that in this he had for a time the assist-

* The other commissions of the late Major-General Estcourt are dated as follow:—Brigadier-General, March 3, 1854; Deputy Adjutant-General, March 28, 1854; Adjutant-General to Forces in Turkey, August 11, 1854; and Major-General, December 12, 1854.

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ance of George Bidder, then a mere lad, who had become conspicuous in London for his surprising powers of mental calculation, and whose great ability has now raised him to the highest position as a civil engineer. One of the objects of the reduction of the Scotch Observations at that time, was the comparison of the base measured by Colonel Colby on Belhelvie Links with the English bases, with a view also to the extension of the Great Triangulation to Ireland, and the measurement of a base in that country. In 1825 and 1826, he became associated with Lieutenant Drummond in his experiments on Light, and in the construction of the compensation bars for the measurement of the Irish base. In the summer of 1825, he proceeded with Drummond to the station of Divis, where the first observations on the oxy-hydrogen lamp were effected.

In 1826 he was one of the trigonometrical party on Slieve Douard, and at the close of that season was detached to some minor country stations before he returned to London.

In 1827 the measurement of the base on the shore of Lough Foyle began, and Murphy again was of the party. In the allotment of duties, to him was entrusted the operation of the alignement, while Drummond performed in person the microscopic adjustments and bisections of the bars themselves. In that and the following year, when the measurement of the base was completed, he carried on the triangulation for connecting the base with the great stations of the survey. On the completion of these operations, Murphy returned to London, and resumed his charge of the computation, more especially after Drummond had become engaged in the larger occupation, unconnected with the survey, which in a few years terminated his brief but bright career.

Murphy's last occupation in England, only collaterally connected with the survey, was in the comparison of standards, undertaken by Mr. Baily, and described by him in the ninth volume of the 'Memoirs of the Astronomical Society,' at the close of which (p. 98) he states :—'In the prosecution of these experiments, however, I must regret having been deprived of the powerful aid of Lieutenant Murphy, whose services were now required to attend the Expedition recently fitted out for the Euphrates, under the command of Colonel Chesney.'

Whilst the Expedition was delayed at the mouth of the Orontes, Lieutenant Murphy, assisted by Mr. Fitzjames, Lieutenant Cockburn, and Mr. Thomson, surveyed and mapped the coast from Lattakia to the extremity of the Bay of Scanderoou, in order to connect it with Admiral Beaufort's previous survey, &c.

He also, with the assistance of Messrs. Cockburn and Thomson, carried a line of levels from the Mediterranean Sea to the Upper Euphrates at Bir, a distance of rather more than 140 miles.

He likewise determined, astronomically, the principal points between the Mediterranean and Basrah, where, whilst completing his arduous and important services, he fell a victim to fever; and thus a most valuable and talented officer's services were lost to the country, to the deep regret of all who knew his worth.

THE REV. W. J. BUCKNALL-ESTCOURT.

THE Rev. William John Bucknall-Estcourt, a brother of the late Major-General Estcourt, also accompanied the Expedition during its earlier stages. He was educated at Balliol College, Oxford, where he graduated B.A. in 1834, and M.A. in 1838; he was ordained deacon in 1839, and priest in 1841. In 1839, immediately after his ordination, he was appointed Curate of Bishop's Cannings, Wilts, and was transferred to the curacy of Penselwood, Somerset, in 1836. He was Vicar of Sedgeford, Norfolk, from 1849 to 1856, when he was presented by his brother, the Right Hon. T. B. Sotheron-Estcourt, to the Rectory of Long Newnton, Tetbury, Wilts, of which living (value 400*l.*) he is still in possession. For the above facts we are indebted to 'Crockford's Clerical Directory.'

THE LATE LIEUTENANT ROBERT COCKBURN, R.A.

THIS officer, who belonged to the Royal Artillery, was the son of the late Robert Cockburn, Esq., of Leith and Edinburgh; he sought, through the Duke of Wellington, and

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obtained in consequence, employment on the Euphrates Expedition, during which, as the assistant of Lieutenant Murphy, R.E., he took an active part in the surveys of the coast, &c., and also in the more serious task of carrying a line of levels, for a distance of 140 miles and 26 chains, from the Mediterranean to the principal depôt of the Expedition on the River Euphrates. On the completion of this service, Lieutenant Cockburn was allotted the 'Tigris' steamer; and was on board that ill-fated vessel, and among those who perished, when she went down on May 21, 1836. On that morning he had sought for leave to spend the day on board the 'Euphrates' steamer, but, failing to meet the commanding-officer, he returned to his own vessel. To such an apparently trivial mischance was due the loss of this amiable and most promising young officer.

MR. WILLIAM TAYLOUR THOMSON.

THIS gentleman was employed during the Euphrates Expedition as assistant to Lieutenant Murphy, astronomer to the Expedition, and was one of the survivors from the wreck of the ill-fated 'Tigris'; he was appointed Paid Attaché at Teheran, June 12, 1837, as a reward for services during the Euphrates Expedition; accompanied the Mission to Erzerum, when diplomatic relations were suspended in 1839; was deputed on a mission to the Prince Ruler of Khiva, in 1841 and 1842, when the disasters at Cabul occurred; was charged with the investigation, at Senna and Sulaimaniyeh, in Persian and Turkish Kurdistan, of the circumstances which led to an action, in 1842, between the Turkish and Persian troops at Mehrivan; was Chargé d'Affaires at the Court of Persia from November 6 to 29, 1849; was appointed Secretary of Legation at Teheran, April 7, 1852; was again Chargé d'Affaires from March 7, 1853, till April 17, 1855; diplomatic relations having been formally suspended on November 4, 1855, he retired with the Mission to Bagdad, on December 5, 1855; was appointed Chargé d'Affaires and Consul-General in the Republic of Chili, February 24, 1858.—*Foreign Office List.*

CAPTAIN HENRY BLOSSE LYNCH, C.B., K.L.S.

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THE 'Foreign Office List' gives the following summary of the services of Captain Lynch, C.B., who served in an important capacity in the Euphrates Expedition:—He entered the Indian Navy in 1823. Was employed in the survey of the Arabian shores of the Persian Gulf, and was Arabic, Persian, and Hindostanee interpreter to the Commodore commanding in the Persian Gulf; was employed in conducting communications with the Arab tribes, and travelling in Arabia. In 1830, was in command of the 'Enterprise' steam-vessel, in India. In 1832, examined the southern provinces of Persia, and the communications from the Gulf into Southern Persia, under instructions received through Sir John McDonald, late Envoy Extraordinary in Persia, from the Supreme Government of India. In 1834, was second in command under Colonel (now General) Chesney in the Euphrates Expedition. From 1837 to 1842, was in command of the 'Euphrates' and 'Tigris,' and in charge of the postal service across Syria, from Bagdad to Damascus. In 1842, was in command of the Indian naval squadron off the coast of Scinde, in communication with the late General Sir Charles Napier, during the war. From 1844 to 1851, was employed in civil duties at Bombay, as Assistant Superintendent of the Indian Navy, captain of the 'Hastings' flag-ship, officiating Superintendent of the Indian Navy, and member of the Oriental Examination Committee. In 1851, was in command of the squadron of steam-frigates in the River Irrawaddy, and took part in the capture of Rangoon, the relief of Martaban, and the whole of the operations of the war. Was created a C.B. December 3, 1853, for services in Burmah. In 1857, was employed at Paris, in conducting negotiations with the Persian Ambassador, which resulted in the Treaty of Paris, March 4, 1857, and accompanied the Persian Ambassador to England in 1857–58.

From Walford's 'County Families' we learn that Captain Lynch is the eldest surviving son of the late H. B. Lynch, Esq., of Partry House, co. Mayo (a major in the army), by Elizabeth, daughter of Robert Finnis, Esq., of Hythe,

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Kent. He was born 1807, and succeeded to the Mayo estate in 1855; he married, in 1838, Caroline, daughter of Colonel Taylor, of the Bombay Army (formerly Resident at Bagdad).

THE LATE LIEUTENANT R. B. LYNCH.

THIS officer, who belonged to the 21st Bengal Native Infantry, being about to return to India, joined his brother and the Expedition, and took an active part in the transport of the stores, and was one of the mission sent to open friendly relations with the Arabs. *Lieutenant Lynch perished May 21, 1836, in the 'Tigris' steamer.*

THE LATE COMMANDER R. F. CLEAVELAND, R.N.

COMMANDER RICHARD FRANCIS CLEAVELAND entered the Royal Navy in 1824; passed for lieutenant, April 7, 1830. Served as mate in the 'Nautiles,' and again with the same rank in the 'Phœnix,' and was promoted to be lieutenant, October 14, 1834. He joined the Euphrates Expedition at the close of that year, and commanded the steamer up to its termination in 1837; and was employed in the 'Edinburgh' up to July 1839, when, his time being completed, he received the promised reward of a commander's commission for his services. His enterprising spirit carried him to South America, where he unfortunately died in 1842.

CAPTAIN E. P. CHARLEWOOD, R.N.

FROM O'Byrne's 'Naval Biography' we glean the following particulars regarding this officer:—Edward *Phillips* Charlewood, who was born on November 14, 1814, at Oak Hill, county Stafford, is the youngest son of the Reverend C. B. Charlewood, of that place. He entered the Royal Naval College on June 7, 1827, and on June 12, 1829, embarked as midshipman on board the 'Formosa' (18 guns), Captain Joseph Harrison, with whom he served on the coast of Africa until June 1833. Having passed his examination on October 2 of that year, he became attached,

in February 1834, as mate, to the 'Salamander' steam-vessel, employed on Channel service; and in October 1834 joined the Expedition under Colonel Chesney, then preparing for its explorative mission to the celebrated River Euphrates. Throughout the various details of that arduous undertaking, which was only brought to an issue in the spring of 1837, Mr. Charlewood repeatedly acquired official praise, but more especially for his active co-operation in the laborious task of originally transporting the steamers 'Euphrates' and 'Tigris' (to the former of which he was attached with the rank of acting lieutenant) from the vicinity of Antioch overland to the town of Bir, a tract of about 140 miles, almost impassable for the want of roads—as well as for his subsequent exertions in saving the 'Euphrates' when her consort the 'Tigris' foundered in a typhoon. On his return to England, he joined, in July 1837, the 'Excellent' (gunnery ship) at Portsmouth, of which he was appointed lieutenant on January 26, 1838. Removing, on April 25, 1839, to the 'Benbow' (72 guns), Captain Houston Stewart, Lieutenant Charlewood sailed for the Mediterranean; and while on that station took part in the various operations of the Syrian campaign under the late Admiral Sir Charles Napier, including the attack on Tortosa and bombardment of St. Jean d'Acre. On the former occasion (September 25, 1840), he landed at the head of a pioneer party, entered a breach in the wall of the castle, and brought off several stores of corn and rice. For his very gallant conduct in this affair he obtained a commander's commission, dated November 5, 1840, but since that time has been on half-pay. He was promoted to captain on the Retired List of the Navy on January 1, 1855. Captain Charlewood married, on March 18, 1841, Sarah Carlton, second daughter of the late William Wyllie, Esq., of Kingston, Hants.

THE LATE CAPTAIN JAMES FITZJAMES, R.N.

He entered the navy on August 25, 1825, as first-class volunteer on board the 'Pyramus' (42 guns), in which ship, after accompanying Mr. Morier, the British Commissioner, to Mexico, and serving for some time on the Home station,

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he was employed in conveying troops to Malta, Gibraltar, and also to Lisbon, where he was present during Don Miguel's first arrival and usurpation of the throne of Portugal. In December 1830 he became a midshipman, and was present at Athens during the Greek Revolution, and witnessed the occupation of the Palameda, at Nauplia, by the combined English, French, and Russian forces. He served in the 'Madagascar' under Captain E. (afterwards Lord) Lyons, in which vessel King Otho and the Bavarian Regency were escorted from Trieste to Greece. On February 1, 1835, while the Euphrates Expedition was fitting out in the Mersey, Fitzjames distinguished himself by his heroism in plunging overboard, in the face of a strong gale and tide, and saving the life, at the imminent hazard of his own, of a custom-house officer. A piece of plate was in consequence presented to him by the merchants of Liverpool, the freedom of the city was conferred upon him by the Corporation, and the Royal Humane Society and London Shipwreck Institution each voted him a silver medal. From October 1834 till March 1837, he took an active part, as mate of the steamer 'Euphrates,' in all the operations of the Expedition to the celebrated river of that name, under Colonel Chesney, including the laborious work of transporting the above vessel and the 'Tigris' from Suedia to Bir, a distance of 140 miles, across a most difficult country. While returning, on one occasion, from an attack on a tribe of Bedawin Arabs, who had committed depredations on some of his party, Fitzjames unfortunately broke his leg; and on another occasion he was taken prisoner, but released after a captivity of ten days. For his services on the Euphrates Expedition he was promoted to a lieutenancy in the gunnery-ship 'Excellent,' and for his proficiency in gunnery and mathematics obtained a first-class certificate. On October 17, 1838, he was appointed to the 'Ganges,' one of the ships employed, in 1840, on the coast of Syria, during the operations in that country, where he was the officer selected to distribute among the Egyptian soldiery of Beïrūt the proclamations issued by Admiral Sir Charles Napier, for which a price was set upon his head by Soliman Pacha. He was also present at the bombardment of Beïrūt, the operations at D'Journi, and the blockade of Alexandria.

On May 27, 1844, he joined the 'Cornwallis,' the flagship of Sir William Parker in China, whose official praise, as well as that of Sir Hugh (now Lord) Gough, he repeatedly acquired for his meritorious conduct during the hostilities of 1842, his name occurring in not less than five gazettes. In the course of that year he directed, with excellent precision, the fire of the rocket-brigade in the attack on the heights of Segoun and Tzekee, March 15 and 16; and had also charge of the rocket-party at the taking of Chapoo, May 18. He served on shore at the battle of Woosung, June 16; again commanded the rocket-brigade at the storm and capture of Chinkiang-Foo, July 21, when he was severely wounded; was present at the signing of the Treaty of Nankin, and participated in all the operations on the Yang-tse-Kiang. On December 23, 1842, he was rewarded by promotion to the rank of commander, and on the 30th of the same month was appointed to the 'Clio,' a sloop of 16 guns. After visiting Basrah and Kurnah, at the junction of the Tigris and Euphrates rivers, he was sent to quell disturbances among the crews of merchantmen loading guano at Ichaboe, on the coast of Africa, and was paid off on his arrival in England in October 1844. Since March 4, 1845, Fitzjames (whose commission as captain bears date December 31 of that year) has been in command of the 'Erebus' discovery ship, Captain Sir John Franklin, which was employed in the attempt to explore the North-West passage through Lancaster Sound and Behring's Straits, and had the conduct of the magnetic operations connected with that unfortunate expedition.—*From O'Byrne's Naval Biography.*

CAPTAIN HENRY EDEN, R.N.

CAPTAIN HENRY EDEN, R.N., entered the navy, as a first-class volunteer on board the 'Hyperion' (42 guns), January 6, 1825. He subsequently served on board the 'Menai,' the 'Messenger' steamer, and 'Prince Regent,' in the Mediterranean; then as mate on board the 'Hermes' and 'Flamer' steamers. In January 1834, he joined the gunnery-ship 'Excellent,' and in December of the same year he was appointed to serve on the Expedition going to the River Euphrates; and, after assisting in the transport and floating of the two steamers prepared for

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that service, he was on board the 'Tigris' steamer when she was carried to the bottom by a hurricane on May 21, 1836. On his return to England, in the following year, he was appointed to the 'Beagle,' Captain Wickham, whom he assisted, until 1841, in the survey of the coast of Australia and Bass's Straits. Under the Hon. (now Sir) H. Keppel, he was actively employed in the Yang-tse-Kiang during the closing operations of the Chinese war. On the day after the taking of Woosung (June 17, 1842), he landed in command of the boats' crews of the squadron, and of the marines of the 'Dido,' and destroyed the enemy's forts, magazines, &c. Eden has been on half-pay since 1846, and was promoted to the rank of captain on the Retired List on July 1, 1864.—*O'Byrne.*

MR. A. HECTOR.

MR. ALEXANDER HECTOR had the very strong recommendation of having served in the Niger Expedition, and he joined that going to the Euphrates as storekeeper and purser. But he took a much more active part in the service than his position required, and was especially active and efficient during the transport of the vessels and stores. Towards the close of the Euphrates Expedition he had charge of the postal line through Arabia, and he subsequently settled as a merchant at Bagdad, where his establishment has been, and continues to be, most prosperous.

DR. C. F. STAUNTON.

CHARLES FREDERICK STAUNTON, M.D., of the Royal Artillery, acted as medical officer to the Euphrates Expedition. His commissions in the army bear date as follows:—Assistant-Surgeon, November 13, 1830; Surgeon, June 1, 1846; and he was placed on half-pay, March 10, 1857. His medical degrees are as follows:—M.B. of Trinity College, Dublin, 1827; member of the Royal College of Surgeons of England, 1830; M.D. of University of Dublin, 1841; and Fellow of the Royal College of Surgeons of England, 1852. He registered himself as a medical practitioner on June 27, 1859, and has been in professional practice at Brighton since that period.

Mr. A. A. STAUNTON.

Mr. Andrew Aylmer Staunton joined the Expedition with first-rate qualifications as a draftsman, and as possessing much experience in Natural History, especially in the preparation of specimens, in which he was indefatigable and most successful. Many of his numerous and valuable drawings went down in the 'Tigris,' from which vessel he and his brother most happily escaped. He had volunteered his services, and at the close of the Expedition he was appointed assistant-surgeon in the Ordnance Medical Department, his commission bearing date September 20, 1836. He died in Canada a few years ago.

Mr. WILLIAM AINSWORTH, SURGEON AND GEOLOGIST OF THE EUPHRATES EXPEDITION.

In order to lessen the number of officers attached to the Euphrates Expedition, and diminish the expenditure, such medical officers were sought for as would be qualified to take one of the scientific branches, in addition to the ordinary medical duties. Accordingly, Mr. William Ainsworth—son of Captain John Ainsworth, of the 15th Foot, the descendant of an old family—was to undertake the geological department, for which his antecedents had fully prepared him; for on passing his examination as a licentiate of the Royal College of Surgeons of Edinburgh, in 1827, he received instruction of a more general and practical description in Paris, where he became an *interne* of the School of Mines. He subsequently had practical experience in geology in the Auvergne and Pyrenees, &c. On returning to Scotland, in 1829, he edited for two years the 'Edinburgh Journal of Natural and Geographical Science,' and gave lectures on geology. When the cholera made its appearance at Sunderland in 1832, he was one of the first to grapple with and study this new epidemic, and the result of his observations was given to the world in a work on Cholera,* in consequence of which he was appointed surgeon to, and visited successively, the hospitals at St. George's, Hanover Square (London), and Westport, Ballin-

* 'Observations on the Cholera in Sunderland in 1832.'

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robe, Claremont, and Newport, in Ireland, delivering lectures also in Limerick and Dublin.

In 1835, he was appointed geologist to the Euphrates Expedition, and published, as the result of his observations, 'Researches in Assyria, Babylonia, and Chaldæa.'

In 1838, he was deputed, with Mr. Christian Rassam, by the Royal Geographical Society and the Society for Promoting Christian Knowledge, to the survey of certain little-known parts of Asia Minor, including more particularly the Valley of the Halys, and to visit the Nestorian Christians in Kurdistan. He published, as a result of his researches, 'Travels in Asia Minor, Mesopotamia, and Armenia' (2 vols., Parker, 1842).

His 'Travels in the Track of the Ten Thousand Greeks,' (of which an analysis, with additions, was given in Bohn's edition of 'Xenophon's Anabasis') was the result of the two journeys, which were spread over a period of seven years. He also published a brochure in favour of 'The Claims of the Oriental Christians.' He likewise edited Barker's 'Lares and Penates, or Cilicia and its Governors,' and has since published 'The Euphrates Valley Route to India,' and edited the 'Illustrated Universal Gazetteer,' and three volumes of an illustrated work entitled 'All Round the World.' Mr. William Ainsworth withdrew into private life on his return from the expedition to Kurdistan, and has ever since acted as assistant editor of the 'New Monthly Magazine' and 'Bentley's Miscellany.' Besides contributing to many learned publications, and writing the Natural History part of 'Cassell's Bible Dictionary,' Mr. William Ainsworth also acted as secretary to the Syro-Egyptian Society for many years; and was one of the founders, at first secretary, and is now treasurer, of the West London Hospital and Dispensary.

Mr. Ainsworth is a fellow of the Society of Antiquaries and of the Royal Geographical Society, besides being a member of the Archæological Association, and an honorary member of the Limerick Institute; he is also a corresponding member of the Geographical Society of Paris, the Oriental Society of Germany, and the Natural History Society of Moldavia, and vice-president of the Institut d'Afrique. He likewise formerly held the office of President of the Royal Medical Society of Edinburgh.

MR. C. A. RASSAM.

MR. CHRISTIAN ANTHONY RASSAM is a native of Mosūl, to which city his great-grandfather had migrated from the coast of Malabar. His father was a Chaldean priest, or clergyman of the Nestorian Church. Mr. C. A. Rassam was his eldest son. When quite a lad he accompanied a caravan going from Mosūl to trade in the heart of Arabia, and at a later period was employed in translating Arabic MSS. at the college at Malta. After several years spent in this literary occupation, he joined the Euphrates Expedition as Arabic interpreter, and subsequently undertook a journey into Kurdistan on behalf of the Royal Geographical Society and of the Society for Promoting Christian Knowledge, in company with Mr. Ainsworth. His zeal, superior intelligence, and usefulness during both these expeditions procured for him the appointment of British Vice-Consul at Mosūl, which he has held since 1837.

MR. WILLIAM QUIN.

MR. QUIN was formerly a sergeant in the Royal Artillery, and accompanied Colonel Chesney, R.A., in the Euphrates Expedition, after which he received an appointment in the imperial customs in the West Indies in 1840; appointed sub-treasurer, colonial customs, St. Kitts, August 1850; captain, Fort Thomas, December 1850; emigration officer, November 1851; granted by unanimous resolution of both Houses of Legislature, in consideration of onerous duties as sub-treasurer and quarantine officer—100*l.*, March 1854; removed to Antigua, as treasury accountant (salary 300*l.*), August 1857; commissioned as Major commanding Artillery and Infantry, and Brigade-Major of Her Majesty's Volunteer Militia Forces in Antigua, May 1858; by the unanimous resolution of both Houses of Legislature, presented the sum of 100*l.*, in acknowledgment of services rendered the Colony in the organization of the Militia Volunteer Forces, August 1859; appointed Captain-Superintendent of Police in Hong-kong (salary 800*l.*), January 1862, and retired on a pension in 1868.—*Colonial Office List.*

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Mr. JOHN BELL.

Mr. John Bell joined the Expedition at Malta, with strong recommendations from the house of Messrs. Hunter, and his knowledge of Arabic enabled him to take immediate charge of the Maltese assistants. Mr. Bell remained at Port William, in charge of that station, after the Expedition had proceeded down the river. Towards the completion of the Euphrates Service, Mr. Bell went to Abyssinia, and accompanied the late Mr. Walter Plowden on a tour into the interior, where he entered the service of Ras Ali, the former ruler of that country. When Mr. Plowden left Abyssinia, in 1847, with presents from Ras Ali for Queen Victoria, his comrade Bell held the rank of General in the Ras's army. On the defeat of Ras Ali, in 1853, by the late King Theodore, Bell was either taken prisoner by the conqueror, or submitted to him. In either case, however, he was pardoned, and soon stood in as high, or even greater, favour with King Theodore as with Ras Ali. In March 1860, Mr. Plowden, who had in the meantime become British Consul in Abyssinia, was, while travelling to Massowah, on the coast of the Red Sea, wounded and taken prisoner by a chief named Garred, an adherent of Negousye, a rival potentate who disputed the authority of Theodore. Mr. Plowden was ransomed by Theodore, but in the following month he died of his wounds. Theodore, accompanied by Mr. Bell, marched against Negousye for the purpose of avenging Plowden's death; and Garred, who had a force of 2,000 men, was furiously attacked by Theodore's advance-guard, led by Mr. Bell. In the conflict, which was brief, Mr. Bell slew Garred with his own hand, but was himself immediately overpowered and killed by Garred's brothers. Thus ended the singularly chequered career of Mr. Bell, who will henceforth be known in history as 'Theodore's Englishman.' Theodore avenged Bell's death by slaying Garred's brothers, who were captured, with his own hand, and executing all their followers who surrendered. What influence the untimely fate of Bell and Plowden had on the future career of King Theodore it is difficult to say, but we may be permitted to suppose that the remembrance of their loyal devotion to him may, in after-times, have softened

his savage rancour against the English captives, and have prevented him, in the supreme moment of his destiny, from imbruing his hands in English blood. Perhaps the English nation owes it to Bell that the heights of Magdala, now surrounded with the halo of a successful military exploit, are not associated with the gory memories of the hideous Well of Cawnpore!

The *Times* of September 8, 1868, in a review of Dr. Blanc's 'Narrative of Captivity in Abyssinia,' makes the following remarks on the strange relationship between Bell and Theodore:—

'After reading this description (of Theodore), one understands how, in better days, he made such an impression upon a politician of Plowden's penetration, or the marvellous personal ascendancy which he acquired over the man known as "Theodore's Englishman"—Bell. There are in all history few instances of a devotion so loyal, so touching in its simplicity and honest bravery, as that with which this single-hearted, outspoken Englishman worshipped Theodore. He was scarcely ever absent from his side, even at night lying down like a watchdog to protect his beloved master from harm, and at last sacrificing life itself to save him. Yet, in this more than servile devotion there was no real servility. Strange to say, Bell, Englishman-like, dared—what so few favourites whose very existence depended on a master's breath have ever dared to do—frankly to tell Theodore his faults, and, stranger still, Theodore listened and as frankly confessed them. When we reflect that this was the man whom it was afterwards as unsafe even to approach as to come near a wounded tiger, we cannot help thinking that his character presents about as curious and interesting a psychological study as it would be easy in all history to find. Plowden, again—a man of a widely different nature from Bell's, and singularly able—was in his own way scarcely less impressed, although he failed to make a corresponding impression on Theodore. He attributes to the half-clad, half-civilized African views on questions of imperial policy farsighted and profound enough to have been worthy any European statesman; and fairly to appreciate Theodore's ascendancy over these two men, our readers must bear in mind that he had,

APPX. XII.

at the outset, to conquer a prejudice which those who have themselves felt it, or watched its influence in others, might be pardoned for considering unconquerable—the world-wide, world-old pride of race, the innate ineradicable conviction of the white man that he is superior to the black. That any man should inspire another with the sort of devotion, the slave-like yet fearless affection, with which Theodore inspired Bell, is strange enough; but that the African, the despised "man of colour," should reverse Nature's law, and thus inspire the European, is so strange that it would be incredible if we did not have the story upon evidence which places it above all doubt.'

MR. E. B. B. BARKER.

MR. EDWARD BRUCE BOUGHTON BARKER was for three years Clerk in the Consulate at Alexandria, and for some months Private Secretary to Colonel Campbell, formerly Consul-General in Egypt. Was acting unpaid Vice-Consul at Suedia from August 24, 1836, to July 14, 1838, when he was confirmed in that post. He served with the Euphrates Expedition under Colonel (now General) Chesney. Was Acting Consul at Aleppo in 1842, and from February 7, 1855, till May 27, 1857. Was agent for the Land Transport Corps in the Crimea from March 30, 1855, till September 1, 1856, and also agent for the British and Turkish Contingent during the same period. Was appointed Consul for the Ports of Samsoon and Sinope, August 24, 1860. On the abolition of the Consulate of Samsoon, on December 16, 1862, was appointed Vice-Consul at Theodosia, in the Crimea, which office he now holds.—*Foreign Office List.*

In addition to the services of Mr. B. Barker whilst the Expedition remained in Syria, and also subsequently, when Colonel Chesney and Sir John MacNeill were carrying out the railway preparations and survey, he has latterly furnished very valuable statistics in connection with the trade to and from Aleppo and Basrah, &c. (See p. 355.)

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